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ABSTRACT

Project ROME-FOCUS (Field-Oriented Competency Utilization System), a competency-based, field-oriented, training program for school administrators was field tested at Valdosta State College, Valdosta, Georgia, January - May, 1976. An internal evaluation conducted by the instructional staff suggested that principals preferred ROME-FOCUS training to traditional programs, achieved a high percentage of project objectives, perceived significant increases in their competency, and suggested that ROME-FOCUS training was more closely related to on-the-job performance than traditional programs. Using the Georgia Principal's Assessment System, pre, post, and control group comparisons were employed by Project ROME at the University of Georgia in conducting an external evaluation of ROME-FOCUS. The external evaluation results suggest that there was a general improvement in the perception of their work environment. The strongest changes in perception took place in teachers who worked directly with their principal in ROME-FOCUS. (Author)

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PROJECT ROME FOCUS

AN INTERNAL-EXTERNAL EVALUATION REPORT

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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Introduction

The following document is divided into two distinct parts. First, a report describing the internal evaluation of Project ROME-FOCUS is presented.* The internal evaluation contains summary of participant progress toward achieving instructional objectives, an analysis of participant attitudes toward the structural features of the program, an analysis of participant attitudes toward ROME-FOCUS meetings, and an analysis of participant perceptions of the relationship between training and performance. This internal evaluation was done by the project staff at Valdosta State College headed by Dr. Joseph Licata. Second, a report describing the external evaluation of the training program is presented. The external evaluation was conducted by the project scaff at The University of Georgia headed by Dr. Chad Ellett. This part of the evaluation was done by applying the Georgia Principals Assessment System to the training program. Data were generated relative to changes in principal competency as perceived by teachers, an external observer, and the principal himself. Data relevant to changes in teacher and student perceptions of their school environment were also produced.

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*A detailed description of the components and processes in the FOCUS program can be obtained from Dr. Joseph Licata, Department of Educational Administration, Valdosta State College, Valdosta, Georgia. The FOCUS description provided here does not include a discussion of many other required and support activities included in the total training model.

AN INTERNAL EVALUATION OF A FIELD-BASED TRAINING COMPONENT FOR SCHOOL ADMINISTRATORS

by

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Valdosta, Georgia

September 9, 1976

AN INTERNAL EVALUATION OF A FIELD-BASED TRAINING COMPONENT FOR SCHOOL ADMINISTRATORS

Project ROME-FOCUS is a field-based training program for school administrators pursuing the sixth year degree at Valdosta State College. This training component is based on a pool of competency statements verified and validated against school outcome measures.[2] The project represents an effort to develop and execute a training program which literally focuses on these competencies in a field-based setting.

Generally, competency in this project is defined as the demonstrated ability to identify and solve school problems. The theoretical framework for problem solving is a model called consequence analysis. During the five month instructional sequence, each participating school administrator attempts to solve a high priority school problem via certain core problem-solving objectives. These objectives are based on competency statements selected from those available in the verified and validated pool. Monthly, visits to other schools, and the review of resource modules are seen as vehicles by which participants can improve their level of competency. Each program component is designed to help the participant work cooperatively with others in solving real and immediate school problems.

The ROME-FOCUS training model was field tested with 22 school administrators representing Grady County, Thomas County, Thomasville City, and Worth County Schools in Georgia. The program participants earned 15 quarter hours toward the sixth year degree at Valdosta State College. The program began January, 1976 and ended on June, 1976. It extended over the winter and spring quarters at Valdosta State College.

The Design

The purpose of the internal evaluation design was to assess participants' relative to five central perspectives. First, there was a need to determine the extent to which participants attained the outcomes specified in the program objectives. Second, there was a need to determine the extent to which program participants perceived improvement in their performance as a school administrator. Third, there was a need to determine the participants' attitudes toward the structural features of the instructional model. Fourth, there was a need to determine whether or not the participants perceived a relationship between training and performance, particularly with respect to the original design of the program. Fifth, there was a need to assess the relative quality of the instruction encountered by participants in the program. These considerations were assessed in terms of three operational measures described below:

1. The first was the percentage of total project objectives completed by project participants. The problem-solving objectives were evaluated using a semi-structured interview technique. External observers made up of professors from the School of Education at Valdosta State College, not involved in Project ROME-FOCUS, interviewed each participating principal and two of the teachers working on the principal's problem-solving committee to determine the extent to which program outcomes were brought about. This triangulation of perspectives provided a criteria for substantiating specified outcomes. Objectives involving school trips and resource modules were evaluated on the basis of successfully completed reaction reports relative to the problem the principal was attempting to solve in his school.

2. The second measure was a three-item semantic differential which assessed participant attitudes about the relative goodness of concepts like "Project ROME," "My Relationships with Staff," "My Performance in Curriculum

and Instruction." The items used were interesting - boring, fresh - stale, meaningful - meaningless. The semantic differential technique is one of the most widely accepted research techniques in education. Its validity and reliability have been demonstrated repeatedly.[3]

3. Third, a ten item meeting evaluation instrument developed by E. H. Shein was administered at the end of each project seminar.[4] In addition, ROME supervisors also administered this instrument to sample on-campus courses they were teaching. Some of the items on the evaluation form were, "goals of the meeting," "organization of the meeting," or "productivity of the meeting."

FOCUS Objectives

Of the 22 school administrators who began the program 19 completed it successfully. This constituted a 86% completion rate. Reasons for leaving went something like this, "declining health," "too much work," or in one case, the principal just did nothing and was not allowed to continue after the first evaluation. For the most part though, project objectives were met to a high degree. For instance, 96% of all FOCUS objectives were completed, 94% of all school visits were completed, and 96% of all resource modules were completed. While the FOCUS program does allow participants the opportunity to be successful, it does require serious effort on their part. As one principal put it "To be honest, at first I thought this would be a 'gimme', but it turned out to be one of the most rigorous and demanding courses I've ever taken."

Paired Comparisons

Pretest data for the semantic differential were subjected to a paired t-test to determine how ROME participants perceived Project ROME compared to traditional educational administration courses, field-based instruction

as compared to college-based instruction, competency-based instruction compared to traditional graduate instruction. Project ROME, field-based instruction, and competency-based instruction were preferred and significantly so. When this procedure was repeated for the post-test group, these significant differences were exhibited again. Apparently, exposure to the training program did not change the participants' positive attitudes toward project concepts in any way. In fact, by inspecting means, it appears the participants'attitudes improved somewhat. Table 1 and 2 present the paired t-tests done with both the pre-test and the post-test data.

Control Group Comparisons

A control group of 26 students in educational administration responded to the same semantic differential as project participants. Some researchers would argue that this group constitutes the ideal pretest group. That is, if we can assume they were a comparable group,[5] their relative inexperience with the training program gives us an idea of what ROME participant's attitudes were like before ever hearing of Project ROME. The responses of the control group were compared to the post-test responses of the ROME participants. Both the post test and the testing of the control group were done at approximately the same time.

Employing a t-test, several significant attitudinal changes were suggested by this analysis. As could be expected because the control group knew little or nothing of Project ROME concepts, ROME participants were significantly more favorable about Project ROME, consequence analysis, program objectives, and relationships with ROME staff and participants than the comparison group of graduate students in an educational administration class at Valdosta State College. While participants were more positive about their performances in all competency areas, they were significantly more positive about their performance in the areas of staff personnel, fiscal management,

TABLE 1

PRINCIPALS' PERCEPTION OF ROME CONCEPTS VS. TRADITIONAL CONCEPTS IN GRADUATE EDUCATION: PRE-TEST

Traditional Concepts	$\bar{x}$	S.D.	ROME Concepts	$\bar{x}$	S.D.	t	p[a]
Traditional Education Administration Courses	11.68	4.35	Project ROME-FOCUS	18.05	2.68	6.15	0.001
College-Based Instruction	13.45	4.04	Field-Based Instruction	17.68	4.03	4.19	0.001
Traditional Graduate Instruction	12.36	3.98	Competency-Based Instruction	18.63	2.63	6.54	0.001

N-22

a = Two-tailed test

Highest Possible Score=21

TABLE 2

PRINCIPALS' PERCEPTION OF ROME CONCEPTS VS. TRADITIONAL CONCEPTS IN GRADUATE EDUCATION: POST-TEST

Traditional Concepts	$\bar{x}$	S.D.	ROME Concepts	$\bar{x}$	S.D.	t	p[a]
Traditional Education Administration Courses	12.53	5.49	Project ROME-FOCUS	20.18	1.43	6.20	0.001
College-Based Instruction	12.05	4.08	Field-Based Instruction	19.21	2.32	6.14	0.001
Traditional Graduate Instruction	12.58	4.56	Competency-Based Instruction	19.58	1.58	6.86	0.001

N-19

a = Two-tailed test

Highest Possible Score=21

and their role in the school organization. In addition, the participants were more positive about their competency in "system-wide policies and operations," than were non participants. This difference barely missed being significant, a two-tailed significance level of .056. Table 3 contains the relevant statistics.

In terms of the structural features of the project, ROME participants were significantly more positive about field-based instruction, competency-based instruction, and school problem solving than the non participants. It is interesting to note that the non participant comparison group were significantly more positive about college-based instruction than ROME participants. Table 4 contains the relevant statistics.

While there were no significant differences produced relative to the evaluations of school visits and resource modules, it should be noted that the means for both participants and non participants were relatively high for school visits and the non participant mean for resource modules was somewhat higher than for participants. Apparently, school visits are popular among both participants and non participants. The relatively low evaluation of resource modules by project participants might suggest an area in need of possible revision.

Intercorrelations

The various concepts evaluated via the semantic differential were intercorrelated using the Spearman's correlation technique, a statistic which does not require the assumption of a normal population.[6] The nineteen principals responding to this internal evaluation instrument represent a rather select group.

Table 5 depicts the relationships between various ROME-FOCUS program concepts such as "Project ROME-FOCUS," "Field-Based Instruction," "Resource Modules," "School Trips," "Core Problem-Solving Objectives"

TABLE 3

ROME GROUP VS. CONTROL GROUP: SIGNIFICANT DIFFERENCES IN PRINCIPALS' PERCEPTION OF THEIR OWN COMPETENCY

	ROME Group			Control Group				
Variable	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.	N	t	p[a]
Role in School Organization	19.68	1.67	19	17.69	3.31	26	2.64	0.05
Staff Personnel	19.11	2.28	19	17.11	2.86	26	2.59	0.05
Support Management	18.63	2.43	19	15.84	3.30	26	3.26	0.05
Fiscal Management	18.16	2.89	19	15.12	3.64	26	3.12	0.01
System-wide Policies and Operations	16.89	3.20	19	14.54	4.85	26	1.96	NS

a = Two-tailed test

Highest Possible Score=21

TABLE 4

ROME GROUP VS. CONTROL GROUP SIGNIFICANT DIFFERENCES
IN PRINCIPALS' PERCEPTION OF THE PROGRAM

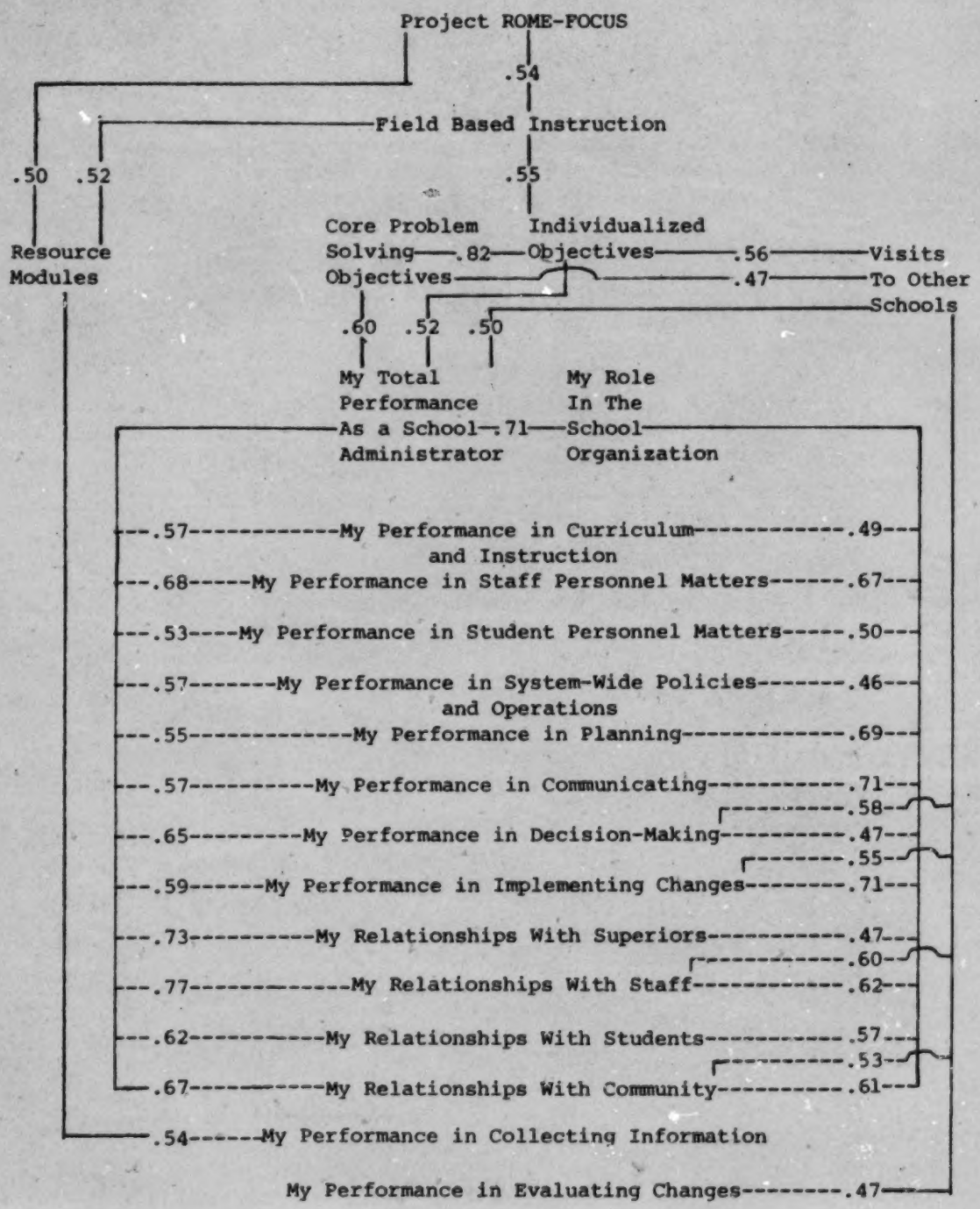
	ROME Group			Control Group				
Variable	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.	N	t	p[a]
Field-Based Instruction	19.21	2.32	19	15.92	3.58	26	3.73	0.001
College-Based Instruction	12.05	4.08	19	14.58	3.15	26	-2.25	0.05
Competency Based Instruction	19.58	1.58	19	15.58	3.82	26	4.81	0.001
School Problem Solving	19.74	1.52	19	17.96	3.14	26	2.51	0.05

a = Two-tailed test

Highest Possible Score=21

TABLE 5

PROJECT ROME-FOCUS INTERCORRELATIONS*
BETWEEN TRAINING AND PERFORMANCE



* Two-tailed test, N=19

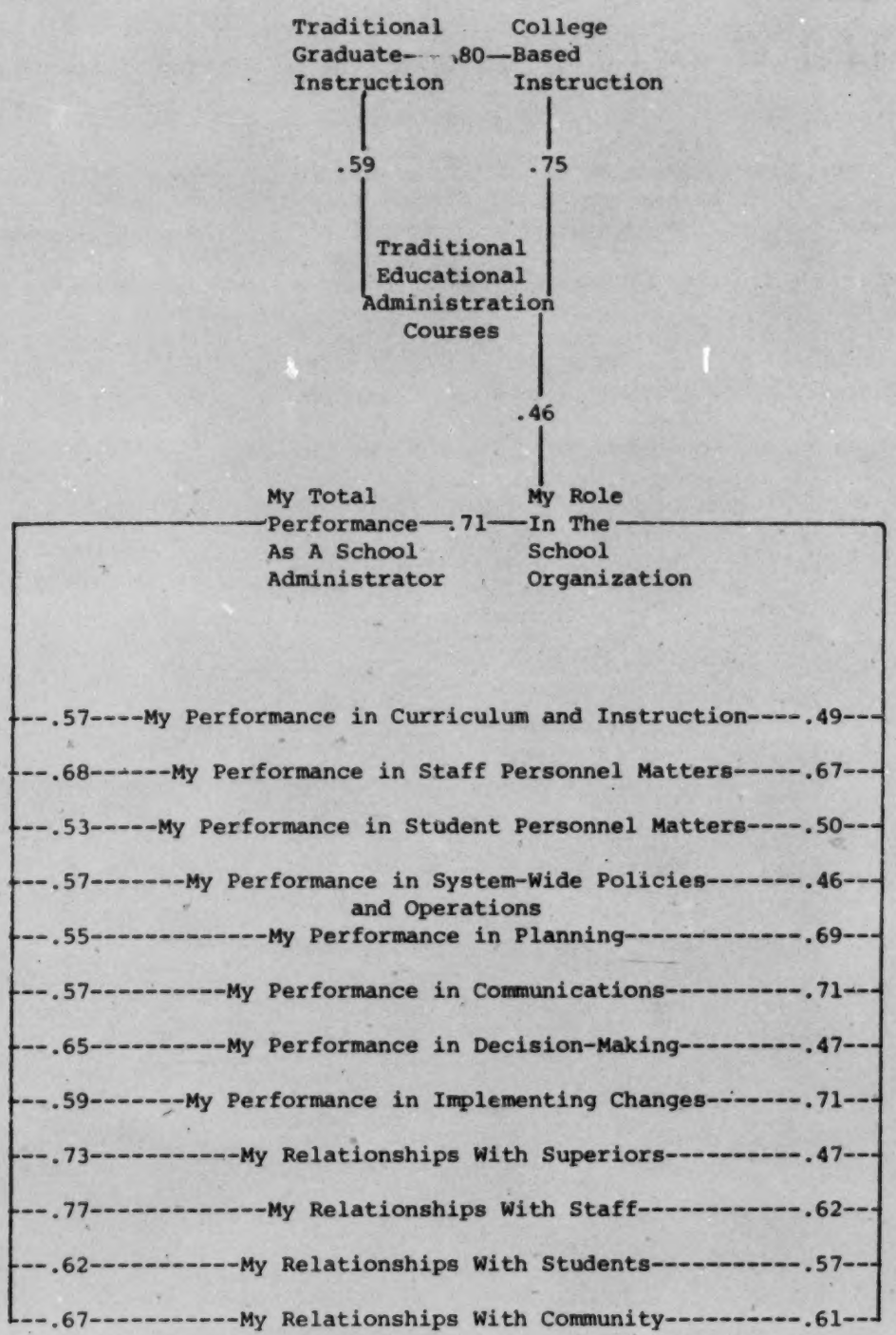
and "Individualized Objectives," with various performance or competency concepts. If the training program is valid, obviously, it should be perceived as being related to performance. The table shows that these concepts appear to be at least indirectly related. The figures attached to the various connecting lines are Spearman correlation coefficients.

The most interesting correlations seem to be those relating program concepts to performance concepts. The correlations in table 5 between participant evaluation of the program's objectives and participant evaluation of their total performance as a school administrator are .60 and .52. Table 6 depicts the relationships between traditional instruction concepts and various performance concepts. The relationship between training and performance exists with respect to participant evaluation of traditional educational administration courses and participant evaluation of their role in the school organization. The correlation coefficient between traditional instruction and performance is .46, somewhat less than the correlations between ROME-FOCUS concepts and performance.

There appears to be at least indirect evidence that program participants perceived the various components of the project somewhat congruently with the original design of the program. On table 5, resource modules are correlated to only one performance area, collecting information. The resource module's stated purpose in the program design is to provide information relevant to the problem that the participant is attempting to solve. Core problem-solving objectives and individualized objectives are correlated at .82. Certainly in terms of the program design, this relationship should exist, since individualized objectives are virtually born out of the core objectives. Since the program objectives are based upon verified competencies and intended to be relevant to real and immediate problems in the participant's schools, the fact that they are directly related to participant perceptions

TABLE 6

TRADITIONAL INSTRUCTION: INTERCORRELATIONS*
BETWEEN TRAINING AND PERFORMANCE


Traditional Graduate Instruction
.80
College Based Instruction
.59
.75
Traditional Educational Administration Courses
.46
My Total Performance As A School Administrator
.71
My Role In The School Organization
.57 My Performance in Curriculum and Instruction .49
.68 My Performance in Staff Personnel Matters .67
.53 My Performance in Student Personnel Matters .50
.57 My Performance in System-Wide Policies and Operations .46
.55 My Performance in Planning .69
.57 My Performance in Communications .71
.65 My Performance in Decision-Making .47
.59 My Performance in Implementing Changes .71
.73 My Relationships With Superiors .47
.77 My Relationships With Staff .62
.62 My Relationships With Students .57
.67 My Relationships With Community .61

* Two-tailed test, N=19

of their performance in the school organization is encouraging. Visits to other schools are intended to improve principal-staff relations and to be relevant to the changes the principal and his committee are studying. In table 5, the correlations between school trips and relations with staff, decision-making, implementing changes, evaluating changes, and relationships with community seem to suggest that the principals perceived this purpose.

These intercorrelations are at best highly tentative in nature. More rigorous research is needed. Keeping in mind the weaknesses inherent in a pilot evaluation design, some speculation might be made based on this intercorrelation matrix. First, there appears to be at least indirect evidence that the ROME-FOCUS program is perceived as being more closely related to administrative practice than traditional educational administrative courses. Second, project participants seemed to clearly understand the means-ends relationships articulated in terms of program components and program competency statements.

Seminar Evaluations

The supervisor for the Thomas County group used the meeting evaluation form in a selected on-campus research class. These ratings were compared with those of a randomly selected FOCUS seminar. The FOCUS seminar was rated higher on all items. Seven out of the ten items were rated significantly more positive. Those items were: "participation in the meeting," "leadership of the meeting," "decisions made during the meeting," "relationship among participants," and "productivity of the meeting." Table 7 contains the relevant statistics.

This experiment was repeated by the supervisor for Worth County and Thomasville City participants. The supervisor used the meeting evaluation forms in two of his supervision classes at Valdosta State College.

TABLE 7

COMPARISON OF THOMAS COUNTY SUPERVISOR'S MEETING EVALUATIONS: A SELECTED ON-CAMPUS MEETING AND A SELECTED FOCUS MEETING

	On Campus			FOCUS				
Items	$\bar{x}$	S.D.	N	$\bar{x}$	S.D.	N	t	p[a]
Goals of Meeting	4.54	0.73	37	4.83	0.41	6	-1.43	NS
Participation in Meeting	4.03	0.87	37	5.00	0.0	6	-6.84	0.001
Leadership of The Meeting	4.32	0.85	37	5.00	0.0	6	-4.83	0.001
Decisions Made During Meeting	4.16	0.76	37	4.83	0.41	6	-3.22	0.001
Feelings During The Meeting	3.95	1.03	37	4.83	0.41	6	-3.74	0.001
Organization of The Meeting	4.51	0.73	37	5.00	0.0	6	-4.05	0.001
Relationship Among Meeting Participants	4.24	0.86	37	5.00	0.0	6	-5.33	0.001
Attitude About The Meeting	4.49	0.73	37	4.67	0.52	6	-0.74	NS
Content of The Meeting	4.49	0.73	37	4.67	0.52	6	-0.74	NS
Productivity of The Meeting	4.41	0.76	37	5.00	0.0	6	-4.74	0.001
Total Scores	43.14	5.29	37	48.83	1.17	6	-5.75	0.001

a = Two-tailed test

Highest Possible Score = 5

In terms of statistical significance, the selected FOCUS seminar was rated as equal to or significantly better than the on-campus supervision classes on all items. The FOCUS seminars were rated significantly more positive on three items. These items were "goals of the meeting," "leadership of the meeting," and "content of the meeting". Table 8 contains the relevant statistics.

Implications of the Evaluation

1. The development of an internal evaluation design for the ROME-FOCUS training program presents some stubborn procedural problems. First, because the program involves a relatively small sample of participants, there may be some question about acceptable sample size for a typical pre and post test design. Second, there is difficulty involved with the maintenance of anonymity among participants in small training groups, with respect to their responses on the internal evaluation forms, a matter which might effect the external validity of their responses. Third, control group comparisons appear to be a viable means for constructing an adequate internal evaluation design, but considerable care is necessary in establishing comparability between ROME-FOCUS group and control groups.

Understandably, last year's efforts primarily involved the development of a sound training program, rather than a thorough internal evaluation design. Now that the instructional program exists, it is recommended that a more intensive effort be expended in the internal evaluation of the training program. Serious consideration should be given to the implementation of a more extensive control group comparison strategy.

This initial field testing of the ROME-FOCUS instructional model and the subsequent internal evaluation tend to support continuation of developmental efforts. The results of the evaluation appear to suggest that training objectives were met to a large degree. Participants favored Project ROME-FOCUS, field-based instruction, and competency-based instruction over traditional

TABLE 8

COMPARISON OF THOMASVILLE AND WORTH COUNTY SUPERVISOR'S MEETING EVALUATIONS: A SELECTED ON-CAMPUS MEETING AND A SELECTED FOCUS MEETING

	F.O.C.U.S.			On Campus				
Items	$\bar{X}$	S.D.	N	$\bar{X}$	S.D.	N	t	p[a]
Goals of Meeting	4.83	0.38	18	4.42	0.61	33	2.92	0.01
Participation In Meeting	4.39	0.70	18	4.64	0.65	33	-1.24	NS
Leadership Of Meeting	5.00	0.0	18	4.61	0.56	33	4.07	0.001
Decisions Made During Meeting	4.33	0.77	18	4.27	0.63	33	0.29	NS
Feelings During Meeting	4.61	0.50	18	4.82	0.39	33	-1.52	NS
Organization Of The Meeting	4.89	0.32	18	4.73	0.45	33	1.47	NS
Relationship Among Meeting Participants	4.78	0.43	18	4.76	0.50	33	0.15	NS
Attitude About The Meeting	4.83	0.38	18	4.82	0.47	33	0.12	NS
Content Of The Meeting	4.94	0.24	18	4.70	0.47	33	2.51	0.05
Productivity Of The Meeting	4.83	0.39	18	4.73	0.45	33	0.88	NS
Total Scores	47.50	2.78	18	46.48	2.48	33	1.24	NS

a = Two-tailed test

Highest Possible Score = 5

graduate education, college-based instruction, and traditional graduate courses in educational administration. Further, meeting evaluations suggest that the FOCUS seminars are evaluated as being equal to or better than on-campus course meetings.

3. There is also evidence to suggest that the FOCUS training program improved participant perceptions of their own competence. Participants tended to see a closer correlation between training and administrative practice in the FOCUS training program as compared to traditional graduate courses in educational administration. Lastly, there is evidence to suggest that participants clearly perceived the means-ends relationships articulated in the program design.

FOOTNOTES

[1]Joseph W. Licata and Charles R. Wilson, "Field-Oriented, Competency-Based Training in School Administration," Resources in Education, ERIC Clearinghouse on Educational Management, July, 1976, ED 119-295.

[2]Chad Ellett, David Payne, and Mark Perkins, "The Relationship of Principals' Competencies and Meaningful School Outcome Measures: A Field Test of the Georgia Principal Assessment System," CCBC Notebook, No. 3, Vol. 5, May, 1976.

[3]J. G. Snider and C. E. Osgood, (eds.), Semantic Differential Technique, (Chicago: Aldine Publishing Co., 1969).

[4]Eager H. Schein, Process Consultation: Its Role In Organization Development, (Reading, MASS: Addison-Wesley, 1969).

[5]Through the use of Chi-Square Analysis and t-tests, there was sufficient evidence to suggest that the pretest group and the control group were similar.

[6]Hubert M. Blalock, Jr., Social Statistics, (New York: McGraw-Hill Book Company, 1972), p. 242.

APPLICATION OF THE GEORGIA PRINCIPAL ASSESSMENT SYSTEM (GPAS) TO A FIELD-BASED INSTRUCTIONAL PROGRAM FOR PUBLIC SCHOOL PRINCIPALS: AN EXTERNAL EVALUATION

by

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Director of Assessment

Project ROME

The University of Georgia

Athens, Georgia

February 28, 1977

Chapter III

APPLICATION OF THE GEORGIA PRINCIPAL ASSESSMENT SYSTEM (GPAS) TO A FIELD-BASED INSTRUCTIONAL PROGRAM FOR PUBLIC SCHOOL PRINCIPALS

One of the major objectives of the Project ROME assessment component during the 1975 - 1976 project year was to conduct a pre- and post-assessment of principals (and their schools) selected to participate in a field-based training program designed and implemented by ROME personnel in the Department of Educational Administration at Valdosta State College (VSC), Valdosta, Georgia. The application of the GPAS to these participants was intended to serve several general project purposes, each of which is explicated in the context of the discussion that follows in this chapter.

Components of the Instructional Program

In keeping with competency-based education models emphasizing the importance of field-based rather than traditional instruction of school personnel, VSC ROME staff developed a five phase instructional system to be piloted during the Spring of 1976 with selected school principals and assistant principals seeking credit toward 6th year certification in the State of Georgia. This instructional system, entitled FOCUS (Field-Oriented Competency Utilization System), was developed to include as content high-priority competencies and performance indicators surviving the 1974 - 1975 ROME verification survey with 290 school principals described in Chapter I of this report.* Working within the framework of a school problem-solving model termed Consequence Analysis, VSC ROME staff selected four FACT statements and relevant

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performance indicators as core objectives operationalizing each step in the consequence analysis training model. In this way a "natural" blending of verified principal competencies and performance indicators and the problem-solving process was achieved.

The FOCUS program was "competency-based" in that administrative competency was defined at a high level of abstraction (the ability to solve school-related problems) on the one hand, and at a low level of abstraction (operationalizing steps in the consequence analysis model through selected principal performance indicators and FACT statements developed by ROME assessment personnel) on the other. The specific FACT statements from which the FOCUS training program core instructional objectives were derived are listed below along with performance indicators restated within the FOCUS model as performance outcome criteria. In addition, major steps in the consequence analysis model operationalized by these FACT statements and relevant indicators are provided to demonstrate the "natural" blending mentioned.

I. INITIATING STRUCTURE

FACT: Modification of Curriculum Content and Organization

Indicators:
1. Schedules released time for teachers to plan for and revise courses during regular school day.
2. Schedules staff meetings to discuss curriculum content areas where modification is needed.
3. Appoints faculty committee to review curriculum content and organization and recommend needed changes.

II. DEFINING THE PROBLEM

FACT: Modification of Curriculum Content and Organization

Indicators:
1. Assesses extent to which curriculum content is perceived as being relevant by students, teachers, and business and community members.
2. Determines curriculum areas needing modification.

III. CHARTING ALTERNATIVES

FACT: Teacher Input and the Design of Curriculum

Indicators:
1. Determines desirable curriculum changes based on classroom observation information, teacher discussion, etc.
2. Encourages teachers to generate new curriculum ideas.

IV. IMPLEMENTING OBJECTIVES

FACT: Evaluation of Student Progress Toward Instructional Objectives

Indicators:
1. Discusses with teachers which procedures for evaluating both short and long range instructional objectives are to be employed.
2. Maintains a system for continuous recording of achievement test data, grades, and other evaluative information.
3. Plans a system for evaluating student progress toward instructional objectives.
4. Periodically evaluates student achievement using standardized tests.
5. Decides what methods are to be used in evaluating progress toward instructional objectives.

V. INTERVENTION

FACT: Teacher Instructional Problem-Solving Skills

Indicators:
1. Plans in-service training to help teachers develop skills necessary for solving instructional problems.
2. Observes teachers in classrooms in order to identify instructional problem-solving skills needing improvement.
3. Periodically discusses classroom goals with teachers.

It might be noted that the Functional Area of Administrative Responsibility reflected in the FACT statements and subsumed performance indicators was Curriculum and Instruction, a general area selected for training owing to the ROME 1974 - 1975 competency validation research results in 45 schools in the State of Georgia. The general classification of curriculum and instruction competen-

cies and performance indicators had been previously demonstrated to show statistically significant and frequently occurring correlations to both Mediating and Outcome variables within the GPAS validation design (see Chapter I in this report for a results summary). Resulting from the integration of steps in the consequence analysis model with FACT statements and performance indicators was an instructional program in curriculum and instruction problem-solving operationalized through the demonstration of curriculum and instruction performances in the school context. An important dimension of the FOCUS program structure was that all performance indicators selected for the program training objectives had been previously judged by practicing school principals (n=290) as essential for the effective operation of a school.

Pre and Post Assessment Procedures

Since elements in the FOCUS training program centered around high-priority competencies and performance indicators developed by ROME assessment staff at the University of Georgia, and because a major objective for the ROME assessment component during the 1975 - 1976 project year was to demonstrate the "sensitivity" of the Georgia Principal Assessment System (GPAS) to measure principal competency change due to training, a pre and post assessment of FOCUS participants was conducted using all instrumentation in the GPAS. In addition, data derived from the pre assessment provided "baseline" information about principals' competencies and school-related problems for individualization of FOCUS training objectives. Contrasting pre and post assessment data allowed for an "external evaluation" of the FOCUS program in terms of its impact on the solution of school-related problems and hopefully increasing principals' competencies.

Valdosta State College ROME staff identified 23 school administrators (16 principals, 6 assistant principals, and 1 superintendent) from 17 schools,

representing four school districts in Southwest Georgia, to participate in the FOCUS training program initiated in January, 1976. Once these participants were identified, data were collected for all instruments in the GPAS from principals and assistant principals (PPDS - Principal Form I), an external observer (PPDS - E.O. Form I), all teachers in each school (PPDS - Teacher Form I and the School Survey), and all fourth-, eighth-, and eleventh-grade students in particular schools (PPDS - Student Form I and either the Learning Environment Inventory or the My School inventory) in November, 1975. General mechanics of data collection were the same as those described in chapter two of this report and will not be detailed here.

Once these data were scored and summarized for the various GPAS instruments, they were reported to VSC ROME staff on a total group, school system, and individual basis to be used in deriving instructional "content" for the problem-solving process and field-based training of FOCUS participants. Two general classes of information useful to the FOCUS program were reported to VSC staff: problem identification data, and competency assessment data.

Problem Identification Data: GPAS Mediating Variables

In defining school-related "problems" for each FOCUS participant to which the problem-solving process would be applied, VSC ROME personnel utilized data summaries for dimensions of the various GPAS Mediating variable measures. Teacher-related problems were identified by scores on the fourteen dimensions of the School Survey instrument used to assess teachers' attitudes towards dimensions of their working environment. Student-related problems were identified by the fifteen dimensions of the Learning Environment Inventory (secondary schools) and the five dimensions of the My School inventory (elementary schools) used to assess students' perceptions of characteristics of the school climate/learning environment. Data summaries for these

instruments for individual schools were compared to both system and ROME 1974 - 1975 "norm" scores to identify problem areas within the school context. In addition, FOCUS supervisors gave some consideration to the correlational relationships between these Mediating variable measures and school Outcome variables (student achievement and school average daily attendance) resulting from the 1974 - 1975 field-test of the GPAS in 45 schools. This process resulted in the identification of school problems using dimensions of the School Survey, Learning Environment Inventory, and My School instruments having known relationships with meaningful school outcome variables. The lowest obtained scores for various factors measured by these instruments were suggestive of problem areas in the school needing solution. Working with each FOCUS participant, VSC ROME personnel used these pre-assessment data to articulate a high-priority school problem upon which to base an individualized instructional program objective for each administrator.

Competency Assessment Data: GPAS Input Variables

In assessing competencies of individual participants, ROME assessment personnel administered the various Principal Performance Description Survey (PPDS)-Form I instruments developed and field-tested during the 1974 - 1975 project year. Both frequency and effectiveness of performance scores were derived for a large number (n=338) of high-priority performance indicators of principal competencies from teachers, students, and individual principals and assistant principals in the 17 FOCUS schools. In addition, the PPDS-External Observer Form-I was administered to each principal participating in the FOCUS training program.

Individual data summaries were provided to VSC ROME personnel for each of the various PPDS instruments for competencies and performance indicators

classified by both Functional Areas of Administrative Responsibility (Curriculum and Instruction, Staff Personnel, Pupil Personnel, School Community Interface, Fiscal Management, Support Management, and System-wide Policies and Operations) and Administrative Operations (Data Collection, Planning, Communicating, Decision Making, Implementing, and Evaluating) sub-scales. Scores were derived for individuals, systems, and the total group of participants for each PPDS instrument sub-scale. In addition, "normative" data were provided from the 1974 - 1975 GPAS field test in 45 schools in the State of Georgia to be used as a score comparison standard.

Scores for the various PPDS instrument sub-scales allowed for the identification of discrepancies between principals' self-assessments in a variety of competency areas, and assessments by other sources. This "discrepancy analysis" procedure allowed VSC ROME personnel to consult with individual FOCUS participants in planning a program of study requiring the utilization of both required and supplemental program materials. For example, an individual participant having large discrepancies between "self" and "others" in the assessment of Staff Personnel competencies was directed to complete individual learning modules and other resource materials in this area as part of accomplishing the FOCUS training program objective of increasing administrative competence. When discrepancy analysis information was combined with core objectives operationalizing steps in the Consequence Analysis problem-solving model, the FOCUS training program was problem-centered, competency-based, and highly individualized for each participant.

Post-assessment data were collected for all instruments in the GPAS in each participant's school during early May, 1976, at the termination of the FOCUS training program. These data were contrasted to the Fall, 1975 pre-assessment data to assess the impact of the training program on 1) the solution of school-related problems identified through pre-assessment, and 2) the

attainment of competencies in a wide variety of professional areas of administrative responsiblity. The assessment and data analysis design served as a general "external evaluation" of the FOCUS training program in terms of its effectiveness in bringing about change in principals and their schools.

Pre and Post Assessment Results

The following sections of this chapter present major findings from analyses of pre and post assessment data collected on principals participating in the VSC FOCUS training program. The results reported here serve as an "external evaluation" of the program in terms of its impact on principals' specific and general performances (competencies) and teacher and student assessments of characteristics of the school working and learning environment. The general evaluation paradigm assumed that changes in principals' performance levels as a result of the FOCUS experience would "impact" on teacher morale and student attitudes towards dimensions of the school climate/learning environment. Because of the manner in which the Consequence Analysis instructional model was developed to include verified competency indicator statements and the multiple ways in which the various PPDS forms can be scored, several different score comparisons relative to principals' "competencies" are made. Thus, a variety of pre and post score comparisons will be made as each lends interpretation to the impact of the FOCUS training program.

It should be recalled that the original FOCUS participants were 16 principals, 6 assistant principals, and 1 superintendent. Owing to personal difficulties and other factors, several of these participants either dropped out or

did not complete the full five month program. Therefore, pre and post comparisons will only be made for those participants completing the entire program. In addition, since the Georgia Principal Assessment System (GPAS) has been developed for building level principals only, data collected on and in the schools of assistant principals will not be described in great detail. No GPAS data were collected on the one participating superintendent.

In reading the following results, the reader should bear in mind several limitations of the evaluation design. Among these is the difficulty in interpreting significant score changes where these are observed. Since fully six months elapsed between pre and post assessment with the GPAS, many factors other than the training program itself could have possibly influenced the data. The effects of these "confounding" variables can not be separated out without sufficient controls. Owing to both budget and time constraints, a comparative group of administrators serving as a control from which pre and post assessment data could be derived was not included in the external evaluation design. However, for certain instrumentation within the GPAS, "normative" data is available from the 1974 - 1975 field test in 45 schools in the State of Georgia, and this will be used as a "benchmark" where it lends interpretation to the overall results. In addition, comparisons internal to the FOCUS participants can be made for certain GPAS instruments by contrasting data for those principals who completed the program to those who did not. These comparisons are possible because all principals allowed ROME assessment staff to post assess their schools with the GPAS even though they may have dropped out of the FOCUS program.

Even though there were limitations in the external evaluation design, the reader should also remember that the application of the GPAS as a set of assessment procedures for measuring the impact of the FOCUS training model is in a "pilot" phase. As the ROME project continues during the 1976 - 1977 pro-

ject year, revision and refinement of both instrumentation within the GPAS and elements of the FOCUS program, combined with more adequate control groups, should yield more definitive data bearing on the effects of the field-based training approach.

COMPETENCY ASSESSMENT ANALYSES (GPAS INPUT VARIABLES)

This section of the report describes the results of pre and post assessment comparisons of data derived from administration of the various forms of the Principal Performance Description Survey - Form I instruments. All principals participating in the FOCUS program were administered the PPDS - Principal Form I instrument which contained 338 statements of principal competency (performance) for which two ratings were to be provided: Frequency of Performance (1--Never to 5--Very Often) and Effectiveness of Performance (1--Ineffective to 5--Very Effective). Teachers in each principal's school were administered the PPDS - Teacher Form I instrument which consisted of 117 statements of principal performance for which ratings were to be provided using rating scales identical for those for the PPDS - Principal Form. In addition, each principal was administered the PPDS - External Observer Form I instrument in an interview setting which yielded "product" ratings (1--Informal to 4--Product) for a maximum of 155 principal performances. Thus, pre and post assessment data were obtained from three competency assessment sources: 1) the principal himself, 2) all teachers in a principal's individual school, and 3) an external observer. The specific format of the PPDS - Form I instruments is the same as that used for the PPDS though the item content is different.

Scoring Procedures

For purposes of the external evaluation results reported here, scores on the various PPDS instruments were derived in several ways, each having implications for inferences about the impact of the FOCUS training program. One scoring procedure used was to aggregate individual items on a PPDS instrument into their original bivariate classification by both Functional Areas of Administrative Responsibility and Administrative Operations composites. Composite scores were computed by summing all item ratings and deriving a total "composite" score for the various Functional Areas and Operations. This allowed for a comparison of "general" areas of competence in terms of both frequency and effectiveness ratings for the PPDS - Principal and Teacher Form I instruments. Since the number of items comprising a particular competency composite varied from one Functional Area or Administrative Operation to another, average item ratings for particular composites were computed to make within instrument comparisons. Similarly, converting total composite scores to percentage of maximum possible scores allows for a comparison of composite ratings between instruments. These techniques will become more clear when describing results of the PPDS administration. The PPDS - External Observer instrument was similarly scored, but yields only one score per item (product rating) rather than two (both frequency and effectiveness ratings).

Another scoring procedure used in analyzing the data reported here was to compute FACT (Functional Area Category Title) scores for those FACTs represented by performance statements on a particular PPDS instrument. This procedure was followed because of the manner in which the Consequence Analysis model included FACT statements at points in the problem-solving process. In addition, because of the need to examine individual competency (FACT) indicator statements included in the FOCUS program, individual indicator scores for

the various PPDS instruments were computed. This allowed for an examination of pre and post assessment differences between participants on the very performance indicators from which instructional objectives in the FOCUS program were derived. Results of pre and post assessments with each PPDS instrument are discussed below.

Results of Principal Performance Description Survey - Principal Form I Administration

Each principal participating in the FOCUS program was administered the PPDS - Principal Form instrument in the Fall of 1976 and again in May, 1976. As mentioned above, this instrument contained 338 high-priority statements of principal performance for which two ratings were provided: Frequency of Performance and Effectiveness of Performance. A summary of pre and post assessment scores for principal performance statements classified by Functional Areas of Administrative Responsibility is presented in Table 13 and 14. The data in Table 13 for frequency of performance ratings strongly support the fact that FOCUS principals perceived themselves as more frequently carrying out a wide variety of performances in the school at the termination of the FOCUS program, than at its inception. Six of the seven functional areas classifications on the PPDS - Principal Form I instrument yielded post assessment scores significantly higher than pre assessment scores ($p<.05$). The System-wide Policies and Operations composite scores, though not statistically different, were in the hoped-for direction. These data represent somewhat surprising findings since the pre assessment scores were generally rather high considering the total maximum possible score on the instrument, thus reducing the amount of post assessment gain possible. In terms of their own self-ratings, these principals perceived themselves as more frequently performing activities in a wide variety of functional areas of administrative responsibility at the end of the field-based training program than at its beginning.

TABLE 13

Summary of Pre and Post Assessment Scores for the PPDS - Principal Form Composites by Functional Areas of Administrative Responsibility (Frequency Ratings) (n=12 principals)

PPDS - Principal Form Subscales Functional Areas of Administrative Responsibility	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (74)[1]	325.33	34.62	4.40	87.93	357.17	12.24	4.83	96.53	*
2. Staff Personnel (56)	242.17	24.68	4.32	86.49	262.17	14.06	4.68	93.63	*
3. Pupil Personnel (66)	306.33	20.12	4.64	92.83	320.83	11.65	4.86	97.22	*
4. Support Management (8)	35.00	4.57	4.38	87.50	38.42	2.35	4.80	96.05	*
5. School-Community Interface (6)	23.67	2.93	3.95	78.90	27.92	2.50	4.65	93.06	*
6. Fiscal Management (74)	318.17	38.56	4.30	85.99	333.58	32.05	4.51	90.16	*
7. System-wide Policies and Operations (54)	237.42	20.61	4.40	87.93	241.67	27.07	4.48	89.50	

[1]Number of items comprising subscale

*Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

TABLE 14

Summary of Pre and Post Assessment Scores for the PPDS - Principal Form Composites by Functional Areas of Administrative Responsibility (Effectiveness Ratings) (n=12 principals)

PPDS - Principal Form Subscales Functional Areas of Administrative Responsibility	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (74)[1]	199.42	46.45	2.66	53.90	251.67	75.06	3.40	68.01	*
2. Staff Personnel (56)	182.00	22.19	3.25	65.00	204.75	40.12	3.66	73.13	*
3. Pupil Personnel (66)	232.22	23.82	3.52	70.40	236.50	61.48	3.58	71.67	
4. Support Management (8)	27.33	11.87	3.42	68.33	31.25	6.15	3.91	78.13	
5. School-Community Interface (6)	19.00	3.41	3.16	63.33	20.17	8.41	3.36	67.73	
6. Fiscal Management (74)	256.17	34.13	3.46	69.24	221.25	105.43	2.99	59.80	
7. System-wide Policies and Operations (54)	154.92	31.64	2.87	57.38	199.67	45.73	3.70	45.73	*

[1]Number of items comprising subscale

*Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p<.05$)

Table 14 summarizes pre and post assessment scores for principals' own effectiveness of performance ratings for the PPDS - Principal Form I Functional Areas of Administrative Responsibility. Again, some statistically significant differences between pre and post assessments were evidenced when comparing pre and post data. It might be noted that all of the composite ratings were in the predicted direction (i.e., post assessment scores higher than pre assessment scores), except for the Fiscal Management classification. Pre and post assessment differences for the Curriculum and Instruction, Staff Personnel, and System-wide Policies and Operations composites were significantly different ($p<.05$), in the direction of higher post test mean scores. As with the frequency of performance ratings, principals participating in the FOCUS training program generally perceived themselves as more effectively carrying out a wide variety of performances at the termination of the program than at its beginning.*

It will be recalled that the 338 principal performance statements comprising the PPDS - Principal Form I instrument were classified by both Functional Areas of Administrative Responsibility and Administrative Operation on the basis of statement content. Thus, subscale scores were derived for each classification schema. Pre and post assessment scores for the Administrative Operations subscale for frequency and effectiveness of performance ratings are presented in Tables 15 and 16, respectively. The data in Table 15 indicate that FOCUS principals' post assessment scores for every Administrative Operations subscale were significantly higher ($p<.05$) than pre assessment scores. To reiterate, these are

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*In comparing frequency and effectiveness of performance scores for either the PPDS - Principal or Teacher Forms, the reader should remember that Effectiveness of performance ratings will be generally lower than Frequency of performance ratings because of the scoring procedure applied. Principals and teachers were instructed to omit the Effectiveness rating for any item given a Frequency rating of 1--NEVER.

TABLE 15

Summary of Pre and Post Assessment Scores for the PPDS - Principal Form Composites by Administrative Operations (Frequency Ratings) (n=12 principals)

PPDS - Principal Form Subscales Administrative Operations	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (39)[1]	169.75	18.61	4.35	87.05	186.83	6.48	4.79	95.81	*
2. Planning (49)	205.75	27.48	4.20	83.98	219.67	22.61	4.48	89.66	*
3. Communicating (101)	445.67	44.55	4.41	88.25	479.67	21.12	4.74	94.98	*
4. Decision Making (45)	205.08	17.51	4.56	91.14	208.67	15.97	4.64	92.74	*
5. Implementing (64)	284.25	22.73	4.44	88.83	299.83	16.26	4.68	93.70	*
6. Evaluating (40)	177.58	11.97	4.44	88.79	187.08	14.49	4.68	93.54	*

[1]Number of items comprising subscale

*Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p<.05$)

TABLE 16

Summary of Pre and Post Assessment Scores for the PPDS - Principal Form Composites by Administrative Operations (Effectiveness Ratings) (n=12 principals)

PPDS - Principal Form Subscales Administrative Operations	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (39)[1]	121.08	15.34	3.10	62.09	137.25	35.61	3.52	70.38	
2. Planning (49)	135.42	32.85	2.76	55.27	144.92	60.70	2.96	59.15	
3. Communicating (101)	325.92	32.96	3.23	64.54	373.08	78.10	3.69	73.88	*
4. Decision Making (45)	137.67	28.11	3.06	61.19	148.83	40.14	3.31	66.13	
5. Implementing (64)	239.17	19.88	3.74	90.37	228.50	61.75	3.57	71.41	
6. Evaluating (40)	111.92	23.52	2.80	55.96	132.67	34.58	3.32	66.34	*

[1]Number of items comprising subscale

*Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

somewhat surprising findings since pre assessment scores were generally quite high for the various Administrative Operations composites (see percentage maximum possible column). The data does support, however, the fact that these principals perceived themselves as more frequently participating in the wide variety of performances comprising the various Administrative Operations composites at the end of the program, than at its inception.

A summary of pre and post assessment scores for the PPDS - Principal Form I Administrative Operations composites effectiveness of performance ratings is presented in Table 16. Post assessment means were higher than pre assessment means for each of the composites except Implementing. The Communicating and Evaluating subscale scores were significantly different ($p < .05$) and in the predicted direction. Apparently these principals perceived that they were more effectively carrying out the wide variety of performances comprising the various Administrative Operations subscales at the termination of the program, than at its beginning.

In summary, a comparison of pre and post assessment scores for the PPDS - Principal Form I instrument provided strong evidence that the FOCUS participants perceived themselves as more frequently and effectively performing the set of 338 verified principal behaviors at the end of the FOCUS program. While difficult to attribute these changes in self-perceptions of competence to the FOCUS program alone, the findings do strongly suggest that participants saw themselves as "more competent" at the end of the program than at its beginning. To the extent that this finding is consistent with competency assessments from other sources, it is considered most encouraging.

As mentioned in the scoring procedures section of this chapter, a second type of pre and post assessment comparison for the PPDS - Principal Form I instrument was made by aggregating the instrument items according to their

respective Functional Area Category Title (FACT) classifications. This process allowed for a pre and post assessment comparison on all 68 PPDS - Principal Form I FACTS as well as on the specific FACT statements from which the FOCUS program core objectives were derived. It should also be remembered that both frequency and effectiveness of performance scores were derived for each of the 68 PPDS - Principal Form I FACT classifications.

The results of the pre and post assessment analysis of the FACT structure of the PPDS - Principal Form instrument for the FOCUS participants indicated that statistically significant differences ($p<.05$) for frequency of performance ratings on specific FACTS from which the program core objectives were derived did not occur. However, post assessment scores for these FACTS (frequency ratings) were all higher than pre assessment scores. As regards the complete FACT structure of the instrument, significantly higher ($p<.05$) post assessment means were found for frequency of performance ratings for 6 of the 68 FACT statements. These particular FACTS were: 1) Lower Staff Decision-Making and Organizational Responsibilities, 2) Staff Professional Identification and Development, 3) Financial Resources and Staffing Needs, 4) Compatibility of System and School Goals and Objectives, 5) Staff Decision-Making Responsibilities, and 6) System Assigned Subject Matter Specialists. For frequency of performance ratings for the complete PPDS - Principal Form I instrument, 71% (48 of 68 possible) of the FACT scores showed higher post assessment than pre assessment means, an encouraging finding considering the small number of principals in the program ($n=12$) on which the comparisons were made.

For the effectiveness of performance ratings, pre and post assessment means for the specific FACTS on which the FOCUS program core objectives were based did not significantly differ, though post assessment scores were all slightly higher. As regards the complete FACT structure of the PPDS - Principal Form I instrument, significantly higher ($p<.05$) post assessment means were found for the effective-

ness of performance ratings for 11 of the 68 FACT statements. These particular FACTS were: 1) Standardized Instruments and the Evaluation of Educational Program, 2) Teachers' and Students' Academic Performance Criteria, 3) Lower Staff Decision-Making and Organizational Responsibilities, 4) Staff Professional Identification and Development, 5) Informal Principal/Student Interaction, 6) Delegation of Authority for Internal Accounting, 7) Compatibility of System and School Goals and Objectives, 8) Staff Decision-Making Responsibilities, 9) Superintendent and Recommendations Concerning Prospective Employees, 10) Superintendent and Planning System Educational Goals, and 11) Long-Range System Planning and Current School Problems. It might be noted here, that four of the above FACT statements (numbers 3, 4, 7, and 8) were the same as those for frequency of performance ratings. For effectiveness of performance ratings for the complete PPDS - Principal Form I instrument, 79% (54 of 68 possible) of the FACT scores showed higher post assessment than pre assessment means, an encouraging finding considering the small number of participants (n=12) on which the comparisons were made.

In summary, the pre and post assessment analyses of the PPDS - Principal Form I FACT structure indicated some significant changes in competency perception by principals participating in the FOCUS program, though the differences for FACTS from which specific FOCUS program core objectives were derived were not statistically significant. Each of these scores, however, was at least in the hoped-for and predicted direction. In addition, overall global changes in the direction of higher post assessment than pre assessment FACT scores were noted for a large percentage of the FACTS comprising the instrument. Apparently FOCUS participants saw themselves as both more frequently and effectively carrying out performances subsumed under the individual FACTS at the termination of the FOCUS program, than at its beginning.

For the particular FACTS comprising the FOCUS training program core objectives, pre and post assessment comparisons were also made for each specific FACT indicator statement (see pages 51 and 52 for a listing of these indicators statements). For the frequency of performance ratings, statistically significant differences ($p<.05$) in favor of post assessment means were noted for the following 3 FACT indicators: 1) Determines desirable curriculum changes based on classroom observation, teacher discussion, etc., 2) Schedules released time for teachers to plan for and revise courses during the regular school day, and 3) Organizes faculty committees to evaluate curriculum content. For the effectiveness of performance ratings, statistically significant differences in favor of higher post assessment means were noted for the following 2 FACT indicators: 1) Encourages teachers to generate new curriculum ideas, and 2) Determines curriculum needing modification. Considering the total of 15 indicator statements for the four FOCUS FACT objectives, post assessment means were higher than pre assessment means for 8 frequency of performance ratings and 11 effectiveness of performance ratings, though some of these differences were rather small.

When considering the results of comparing FOCUS participants' pre and post assessment PPDS - Principal Form I scores in a variety of ways, it appears that their self-perceptions of "competence" were higher at the end, than at the beginning of the FOCUS program. This finding held for both frequency and effectiveness of performance rating scales. As previously mentioned, though difficult to attribute these changes in principals' self-perceptions of performance to elements of the FOCUS program without additional controls, the results do strongly support the fact that changes occurred in the hoped-for direction. A clearer understanding of the degree to which changes in self-perceptions of "competence" can be attributed to elements in the FOCUS training program should be forthcoming after the second application of the GPAS to program participants during the 1976 - 1977 project year.

Results of Principal Performance Description Survey - Teacher Form I Administration

The Principal Performance Description Survey (PPDS) - Teacher Form I instrument was administered on a pre and post assessment basis to all teachers within schools of principals participating in the FOCUS training program. Approximately 85% (n=244) of the teachers returned the completed instrument as requested. The PPDS - Teacher Form I instrument consisted of 117 statements of principal performance for which both frequency and effectiveness of performance ratings were obtained. As with the PPDS - Principal Form I instrument, several different pre and post assessment scores were derived for the PPDS - Teacher Form I to assess changes in the total sample of teachers' perceptions of their principal's "competency." In addition, since one of the objectives of the FOCUS program stated that principals would identify and work with a committee of teachers on an identified school problem, "special project" teachers were compared to "non-project" teachers on a post assessment only basis. It was predicted that post assessment scores on the PPDS - Teacher Form I instrument for the total teacher sample would be significantly higher than pre assessment scores. Also, it was hoped that "special project" teachers would rate their principal's performance significantly higher than other teachers in the sample if the FOCUS participants were indeed having an impact on teacher perceptions of competence...an impact assumedly brought about through the effect of the FOCUS program on principal behavior in the school setting.

A summary of pre and post assessment scores for the Functional Areas of Administrative Responsibility composites of the PPDS - Teacher Form I instrument for frequency and effectiveness of performance ratings is presented in Tables 17 and 18, respectively. The data are derived from 244 teachers (both elementary and secondary) in 12 schools. A t test for correlated means was used to test pre and post assessment composite means for statistical significance.

TABLE 17

Summary of Pre and Post Assessment Scores for the PPDS - Teacher Form Composites by Functional Areas of Administrative Responsibility (Frequency Ratings) (n=244 teachers)

PPDS - Teacher Form Subscales Functional Areas of Administrative Responsibility	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (35)[1]	98.65	19.76	2.82	56.37	106.27	16.85	3.04	60.72	*
2. Staff Personnel (40)	119.99	17.55	4.00	86.53	125.97	19.81	3.15	62.99	
3. Pupil Personnel (17)	53.00	6.42	3.12	62.35	54.85	7.43	3.23	64.52	
4. Support Management (0)	------[2]	-----	----	-----	------	-----	----	-----	
5. School-Community Interface (1)	4.33	.44	.87	96.60	4.13	.31	.83	82.60	*
6. Fiscal Management (9)	25.11	4.46	2.79	55.80	25.81	3.94	2.87	57.40	
7. System-wide Policies and Operations (15)	42.10	7.50	2.81	56.13	46.03	5.95	3.07	61.37	*

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and Post-test $\bar{X}$ comparisons significantly different from zero ($p<.05$)

41

TABLE 18

Summary of Pre and Post Assessment Scores for the PPDS - Teacher Form Composites by Functional Areas of Administrative Responsibility (Effectiveness Ratings) (n=244 teachers)

PPDS - Teacher Form Subscales Functional Areas of Administrative Responsibility	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (35)[1]	97.18	25.00	2.78	55.53	106.97	16.36	3.06	61.13	*
2. Staff Personnel (40)	117.21	23.67	4.28	85.66	127.80	17.61	3.20	87.15	*
3. Pupil Personnel (17)	52.64	10.08	3.10	61.93	55.71	7.93	3.28	65.54	
4. Support Management (0)	-----[2]	-----	-----	-----	------	------	-----	------	
5. School-Community Interface (1)	4.31	.45	4.31	86.20	4.24	.38	4.24	84.80	
6. Fiscal Management (9)	25.23	4.82	2.80	56.07	26.52	5.05	2.94	58.93	
7. System-wide Policies and Operations (15)	42.88	8.62	2.86	57.17	46.05	6.24	3.07	61.40	*

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

Viewing the data in Table 17, it can be seen that post assessment scores (frequency of performance ratings) were higher than pre assessment scores for all PPDS - Teacher Form I functional areas composites, with the exception of the School-Community Interface classification. This particular composite (School-Community Interface) is not considered too meaningful within the context of the pre and post assessment since it only consisted of one item. Statistically significant differences in the direction of higher post assessment scores were noted for the Curriculum and Instruction and System-Wide Policies and Operations composites.

For the effectiveness of performance ratings (Table 18), the same general findings were evidenced, with the addition of a statistically significant difference for the Staff Personnel classification of principal performances. The findings for the Curriculum and Instruction composite are most encouraging since the major emphasis of the FOCUS program was in this general training area. Apparently the sample of teachers within the 12 FOCUS participants' schools perceived their principals as more frequently and effectively demonstrating a large number of behaviors in the curriculum and instruction area at the end of the FOCUS program, than at its beginning.

Additional support for the impact of the FOCUS training program on principal performance is provided in Tables 19 and 20. These tables compare post assessment scores for the Functional Areas of Administrative Responsibility (frequency and effectiveness ratings) composites of the PPDS - Teacher Form I instrument for "project" and "non-project" teachers. As can be seen in the tables, project teachers rated their principals' performances as more frequently (Table 19) and effectively (Table 20) occurring in all functional areas of administrative responsibility, than non-project teachers. Statistically significant differences between the two teacher groups for both frequency and effec-

TABLE 19

Summary of Post Assessment PPDS - Teacher Form Composite Scores
by Functional Areas of Administrative Responsibility (Frequency Ratings)
for FOCUS Non-Project and Project Teachers

PPDS - Teacher Subscales Functional Areas of Administrative Responsibility	Non-Project Teachers (n=201) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Project Teachers (n=29) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (35)[1]	104.16	41.42	2.98	59.52	117.81	38.75	3.37	67.32	*
2. Staff Personnel (40)	123.07	42.78	3.08	61.53	131.73	43.78	3.29	65.86	
3. Pupil Personnel (17)	53.55	18.34	3.15	63.00	59.73	17.77	3.51	70.27	*
4. Support Management (0)	-----[2]	-----	----	-----	------	-----	----	-----	
5. School-Community Interface (1)	4.03	1.09	4.03	80.60	4.26	1.04	4.26	85.20	
6. Fiscal Management (9)	25.58	11.19	2.84	56.84	28.73	11.31	3.19	63.84	
7. System-wide Policies and Operations (15)	45.14	16.38	3.01	60.18	48.73	16.04	3.25	64.97	

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and post-test X comparisons significantly different from zero ($p < .05$)

TABLE 20

Summary of Post Assessment PPDS - Teacher Form Composite Scores
by Functional Areas of Administrative Responsibility (Effectiveness Ratings)
for FOCUS Non-Project and Project Teachers

PPDS - Teacher Form Subscales Functional Areas of Administrative Responsibility	Non-Project Teachers (n=201) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Project Teachers (n=29) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (35)[1]	104.69	44.11	2.99	59.82	119.36	47.28	3.41	68.20	*
2. Staff Personnel (40)	123.78	48.33	3.09	61.80	136.21	52.15	3.41	68.11	
3. Pupil Personnel (17)	54.24	20.09	3.19	63.80	59.69	23.06	3.51	70.22	
4. Support Management (0)	------[2]	-----	----	-----	------	-----	-----	-------	
5. School-Community Interface (1)	4.08	1.01	4.08	81.60	4.65	.69	4.65	93.00	*
6. Fiscal Management (9)	25.93	12.18	2.88	57.62	29.96	13.59	3.33	66.58	
7. System-wide Policies and Operations (15)	44.86	17.93	2.99	59.81	50.48	20.87	3.37	67.31	

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and post-test $\bar{X}$ comparison significantly different from zero ($p < .05$)

tiveness ratings were noted for principals' performances in the Curriculum and Instruction area. Apparently the FOCUS program had the general effect of positively impacting on principals' behavior (particularly in the curriculum and instruction area), as well as on teachers' perception of that behavior. Given the "pilot" nature of the application of the GPAS to the FOCUS program, these findings are most encouraging.

Tables 21 and 22 summarize pre and post assessment scores for the PPDS - Teacher Form I Administrative Operations composites for the total teacher sample for frequency and effectiveness of performance ratings, respectively. As with the functional areas classification findings, data for the administrative operations composites indicate that teachers as a group were more positive during post assessment in their perceptions of both the frequency (Table 21) and the effectiveness (Table 22) with which their principals carried out a variety of performances in the school.

For the frequency ratings of various administrative operations (Table 21), statistically significant differences in terms of higher post assessment scores were noted for the Planning, Communicating, and Implementing composites of the PPDS - Teacher Form I instrument. For the effectiveness of performance ratings (Table 22), post assessment composite scores were significantly higher ($p<.05$) for all administrative operations composites with the exception of Evaluating. Apparently teachers in this sample saw the majority of their principals' performances as both more frequently and effectively occurring at the end of the FOCUS program, than at its beginning. In addition, teachers were generally more cohesive in these judgments during post assessment than pre assessment, as inferred from the somewhat smaller post assessment standard deviation scores.

TABLE 21

Summary of Pre and Post Assessment Scores for the PPDS - Teacher Form Composites by Administrative Operations (Frequency Ratings) (n=244 teachers)

PPDS - Teacher Form Subscales Administrative Operations	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (13)[1]	36.69	7.85	2.82	56.45	38.30	6.32	2.95	58.92	
2. Planning (7)	20.03	4.29	2.86	57.23	20.40	3.54	2.91	58.29	*
3. Communicating (74)	213.24	33.07	2.88	57.63	227.19	33.77	3.07	61.35	*
4. Decision Making (0)	-----[2]	----	----	-----	------	-----	----	-----	
5. Implementing (21)	62.00	9.68	2.95	59.04	67.37	9.65	3.20	64.16	*
6. Evaluating (2)	6.95	1.40	3.48	69.50	6.86	1.01	3.43	68.60	

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

TABLE 22

Summary of Pre and Post Assessment Scores for the PPDS - Teacher Form Composites by Administrative Operations (Effectiveness Ratings)
(n=244 teachers)

PPDS - Teacher Form Subscales Administrative Operations	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (13)[1]	35.24	8.06	2.71	54.22	38.37	6.15	2.95	59.03	*
2. Planning (7)	19.97	4.34	2.85	57.06	21.45	3.59	3.06	61.29	*
3. Communicating (74)	212.55	42.91	2.87	57.45	232.17	33.47	3.14	62.75	*
4. Decision Making (0)	-----[2]	-----	-----	-----	------	-----	-----	------	
5. Implementing (21)	61.00	11.97	2.90	58.10	67.73	9.19	3.23	64.50	*
6. Evaluating (2)	7.15	1.19	.72	71.50	7.27	1.03	.73	72.70	

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and Post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

Additional support for the overall positive impact of the FOCUS program is provided in Tables 23 and 24, which compare "non-project" and "project" teachers' post assessment scores on the administrative operations composites of the PPDS - Teacher Form I instrument. As can be seen in these tables, project teachers rated principals higher on all composites for both frequency (Table 23) and effectiveness (Table 24) of performance. For the frequency of performance ratings (Table 23) a statistically significant difference was noted for the Implementing classification. For the effectiveness of performance ratings (Table 24), statistically significant differences in favor of the project teacher group were found for the Planning and Evaluating composites. While other differences between these two teacher groups were not large enough to reach significance at the .05 level, they do demonstrate the generally more positive perceptions of project than non-project teachers of their principals' behavior in the school setting. When combined with the pre and post assessment comparisons made above, these data support the effectiveness of the FOCUS program in both changing principals' behavior in a wide variety of functional areas of administrative responsibility and administrative operations, as well as teachers' perceptions of that behavior.

As mentioned in the scoring procedures section of this chapter, a second type of PPDS - Teacher Form I score was computed by aggregating the instrument items according to their FACT classification. As with the Principal PPDS Form I instrument, this classification and scoring procedure allowed for a pre and post assessment comparison of teacher responses for all 50 FACTs, as well as for the specific FACTs around which the FOCUS core objectives were structured. It should be remembered that both frequency and effectiveness of performance scores were obtained for each of the 50 FACTs on the PPDS - Teacher Form I instrument.

TABLE 23

Summary of Post Assessment PPDS - Teacher Form Composite Scores
by Administrative Operations (Frequency Ratings)
for FOCUS Non-Project and Project Teachers

PPDS - Teacher Form Subscales Administrative Operations	Non-Project Teachers (n=201) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Project Teachers (n=29) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (13)[1]	37.18	14.59	2.86	57.20	41.85	14.15	3.22	64.38	
2. Planning (7)	21.05	8.03	3.01	60.14	23.08	8.55	3.30	65.94	
3. Communicating (74)	221.67	85.13	3.00	59.91	244.92	79.30	3.31	66.19	
4. Decision Making (0)	------[2]	-----	----	-----	------	-----	----	-----	
5. Implementing (21)	65.70	22.78	3.13	62.57	74.19	21.99	3.53	70.65	*
6. Evaluating (2)	6.65	2.39	3.33	66.50	6.96	2.47	3.48	69.60	

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and post-test $\bar{X}$ comparison significantly different from zero ($p \leq .05$)

TABLE 24

Summary of Post Assessment PPDS - Teacher Form Composite Scores
by Administrative Operations (Effectiveness Ratings)
for FOCUS Non-Project and Project Teachers

PPDS - Teacher Form Subscales Administrative Operations	Non-Project Teachers (n=201) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Project Teachers (n=29) $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (13)[1]	37.13	16.67	2.86	57.12	42.17	18.48	3.24	64.88	
2. Planning (7)	21.09	8.43	3.01	60.26	24.93	8.38	3.56	71.23	*
3. Communicating (74)	225.59	90.04	3.05	60.97	253.68	98.30	3.43	68.56	
4. Decision Making (0)	-----[2]	-----	----	-----	------	-----	----	-----	
5. Implementing (21)	65.92	24.06	3.14	62.78	73.97	25.69	3.52	70.44	
6. Evaluating (2)	6.94	2.54	3.47	69.40	7.96	2.19	3.98	79.60	*

[1] Number of items comprising subscale

[2] No items were classified for this subscale

* Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

The results of the pre and post analysis of the FACT structure of the PPDS - Teacher Form I instrument for frequency of performance ratings, indicated that 40% (20 of a possible 50) of the post assessment scores were higher than pre assessment scores, though some of these differences were admittedly rather small. Only 5 FACTs yielded statistically significant ($p<.05$) differences in the direction of post assessment scores. These 5 FACTs were: 1) Teachers and the Design of Instructional Evaluation Methods, 2) Modification of Curriculum Content and Organization, 3) Superintendent and School Staff Tenure/Dismissal, 4) Board of Education Recommendations and the Revision of Educational Plans, and 5) Compatibility of System and School Goals and Objectives. Of the four FACTs from which the FOCUS training program core objectives were derived, only one demonstrated significantly higher post assessment frequency of performance ratings by teachers: Modification of Curriculum Content and Organization. Though it was hoped that principals would be rated by teachers during post assessment as more frequently performing activities subsumed under each of these FOCUS FACTs, the singular finding above is encouraging considering the "pilot" nature of the FOCUS program.

For the effectiveness of performance PPDS - Teacher Form I instrument FACT scores, 34% (17 of a possible 50) of the post assessment scores were higher than the pre assessment scores, though again some of these differences were rather small. Only 3 FACTs yielded significantly higher ($p<.05$) post assessment means. These 3 FACTs were: 1) Modification of Curriculum Content and Organization, 2) Staff Evaluation and In-Service Training, and 3) Student Information System and Pupil Personnel Services. It is interesting to note here that the FACT, Modification of Curriculum Content and Organization yielded significantly higher post assessment effectiveness of performance ratings by teachers.

In summary, the pre and post assessment analyses of the PPDS - Teacher

Form I FACT structure indicated some significant positive changes in teachers' perceptions of principals' competencies occurred, though these were not as frequently occurring as principals' own self-ratings on the PPDS - Principal Form I instrument.

For the 4 FACTs comprising the FOCUS training program core objectives, pre and post assessment comparisons were also made for each of the 7 specific FACT performance indicator statements appearing on the PPDS - Teacher Form I instrument. For the frequency of performance FACT ratings, all seven post assessment means were higher than pre assessment means. Statistically significant differences in the direction of post assessment scores were noted for 2 FACT indicator statements. These indicators were: 1) Schedules released time for teachers to plan for and revise courses during regular school day and 2) Appoints faculty committee to review curriculum content and organization and recommend needed changes.

When considering the variety of pre and post assessment comparisons made with the PPDS - Teacher Form I instrument, strong support for a positive change in teacher perceptions of both the frequency and effectiveness with which their principals performed, was noted. The pre and post assessment comparisons of the PPDS - Teacher Form instrument items classified by Functional Area of Administrative Responsibility and Administrative Operation seemed to yield the most clear and meaningful data when compared to FACT and FACT indicator analyses. This can partly be attributed to an increase in possible score variability when items are aggregated into these larger composites. However, some evidence appeared supporting the general positive impact of the FOCUS program on the participating principals' behavior and teachers' perceptions of its occurrence in the school setting.

Results of Principal Performance Description Survey - External Observer (EO) Form I Administration

A third form of input about performances of principals participating in the FOCUS field-based training program was in the form of "product" ratings for competency performance indicator statements comprising the PPDS - External Observer (EO) Form I instrument. The EO instrument consisted of 155 principal performance statements for which product scores ranging from 1--Informal to 4--Product were obtained from a given principal by a ROME assessment staff member during a structured interview situation. The PPDS - EO instrument was administered on a pre and post assessment basis in the early Fall of 1975 and in the late Spring of 1976. Like the PPDS teacher and principal form instruments, the EO yielded scores for Functional Areas of Administrative Responsibility and Administrative Operations, and for FACTs and FACT indicator statements. Each of these pre and post assessment scores was compared to assess changes in FOCUS participants' behavior during the course of the FOCUS experience. The rationale of the EO instrument required a principal to produce for an observer (interviewer), concrete, tangible, directly observable evidence that a given principal performance had been carried out in the school, in order to obtain a maximum item score of 4--Product. These item scores were aggregated by Functional Area and Administrative Operations composites and by FACT in order to make pre and post assessment performance comparisons.

Table 25 summarizes pre and post assessment PPDS - EO Form I composite scores by Functional Areas of Administrative Responsibility for the 12 FOCUS principals. As can be seen in the table, post assessment means were higher than pre assessment means for every EO composite except Pupil Personnel. Statistically significant changes were noted for the Support Management and School-Community Interface composites, though the Staff Personnel and Fiscal

TABLE 25

Summary of Pre and Post Assessment PPDS - External Observer Form Composite Scores by Functional Areas of Administrative Responsibility for FOCUS Principals (n=12)

PPDS - External Observer Form Subscales Functional Areas of Administrative Responsibilty	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Curriculum and Instruction (35)[1]	50.25	31.29	1.44	35.89	54.67	22.50	1.56	39.05	
2. Staff Personnel (12)	17.75	5.82	1.48	36.98	22.33	7.73	1.86	46.52	
3. Pupil Personnel (29)	52.75	16.11	1.82	45.47	50.17	16.40	1.73	43.25	
4. Support Management (3)	4.00	4.15	1.33	33.33	9.00	1.55	3.00	75.00	*
5. School-Community Interface (3)	4.91	3.91	1.64	40.92	8.18	2.40	2.72	68.17	*
6. Fiscal Management (44)	77.92	11.76	1.77	44.28	87.83	18.47	1.95	25.16	
7. System-wide Policies and Operations (29)	40.83	18.50	1.41	35.20	46.50	16.56	1.60	40.09	

[1] Number of items comprising subscale

* Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

Management composite differences closely approximated significance at the .05 level. While these differences were not extremely large, they do provide some evidence that the FOCUS participants had on hand generally more observable evidence to corroborate their performance of particular competency indicators representing certain functional areas of administrative responsibility at the end, than at the beginning of the training program. This finding is encouraging considering the developmental nature of the PPDS - External Observer Form I instrument.

An inspection of average item ratings in Table 25 indicates that these principals tended to score rather low overall on the EO instrument composites, since most all of the composite ratings were below a midpoint average item rating of 2.0 on the 4-point scale.

Table 26 summarizes pre and post assessment PPDS - EO instrument composite scores for the 155 performance indicators classified by Administrative Operations. It seems evident that this classification of items did not produce composite differences as directionally consistent as the functional areas classification. Pre assessment mean composite scores were higher for Data Collecting and Implementing, while post assessment means were higher for Planning, Decision-Making, and Evaluating. Scores neither increased nor decreased for the group of principals on the Communicating composite. Statistically significant differences in favor of post assessment means were noted for the Decision-Making and Evaluating composites. Scores for the Implementing composite were significantly higher ($p<.05$) during pre assessment. These findings are difficult to interpret at best. However, they do indicate that the EO instrument in sensitive to change in the quantity and quality of observable products available to corroborate a given set of principal performances. The sensitivity of the instrument, however, may be hampered by variables affecting its reliability between administrations (e.g., low inter-observer reliability). In addition, variability

TABLE 26

Summary of Pre and Post Assessment PPDS - External Observer Form Composite Scores by Administrative Operations for FOCUS Principals (n=12)

PPDS - External Observer Form Subscales Administrative Operations	Pre Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	Post Assessment $\bar{X}$	S.D.	Average Item Rating	$\bar{X}$ as % of Maximum Possible Score	
1. Data Collecting (19)[1]	37.25	15.80	1.96	49.01	32.92	8.49	1.73	43.32	
2. Planning (37)	56.00	27.22	1.51	37.84	66.17	21.57	1.78	44.71	
3. Communicating (2)	6.00	2.82	3.00	75.00	6.00	2.82	3.00	75.00	
4. Decision Making (42)	54.33	23.56	1.29	32.34	77.50	19.19	1.84	46.13	*
5. Implementing	64.83	9.04	2.70	67.53	44.67	14.89	1.86	46.53	*
6. Evaluating (31)	31.67	15.65	1.02	25.54	55.08	18.47	1.78	44.42	*

[1]Number of items comprising subscale

*Pre and post-test $\bar{X}$ comparisons significantly different from zero ($p < .05$)

in the direction of the scores in Table 26, when compared to those in Table 25, may represent an artifact of the processes used in classifying the items by various functional areas of responsibility and administrative operations. On the other hand, the administrative operations composite differences may be real. An additional application of a second form of the EO instrument to FOCUS participants during the 1976 - 1977 project year should yield data helpful in clarifying these administration, scoring, and data interpretation difficulties.

The 155 principal performance indicator statements comprising the PPDS - EO instrument were also aggregated by FACT in order to examine pre and post assessment changes in the availability of directly observable performance evidences. For the total FACT structure of the EO instrument, 53% (31 of a possible 58) of the post assessment FACT scores were higher than the pre assessment FACT scores. Post assessment scores were significantly higher ($p<.05$) for the following 14 EO FACTs: 1) Diagnostic and Educational Achievement Testing Program, 2) Student Needs and Curriculum Design, 3) Program for Students' Special Needs and Community Service Agencies, 4) Principal Participation and Attendance at School Activities, 5) Student Cumulative Records, 6) Inspection of School Plant Facilities, 7) Communication with Parents and Local Community, 8) Required Governmental Financial Reports, 9) Budgetary Limits and Instructional Materials and Equipment, 10) Recommendations for Improvement of Physical Facilities, 11) Superintendent and Fiscal Audit Information, 12) School Budget and Legal Requirements, 13) Superintendent and School Staff Tenure/Dismissal, and 14) Superintendent and Recommendations for Physical Facility Improvement. The observation that none of the FACTs from which the FOCUS program core objectives were derived is represented in the above list, is a somewhat surprising finding.

Of the 155 principal performance indicator statements comprising the PPDS -

EO instrument, eight were specific FOCUS FACT indicators. Analysis of pre and post assessment scores for these eight indicators was not too encouraging. Only two of the eight indicators demonstrated higher post assessment than pre assessment means. Neither of these indicators was represented as a FACT indicator in the FOCUS training model. An inspection of pre and post mean scores indicated that pre assessment means were generally higher than post assessment means...a possible artifact of the nature of the EO instrument and its administration. At a minimum, it might be expected that pre and post scores would remain approximately the same for these eight indicator statements. However, this was not the case.

General Conclusions of Pre and Post Competency Assessment Analyses

The application of the Principal Performance Description Survey (PPDS) instruments for principals, teachers, and an external observer to participants in the VSC FOCUS training program, produced some supportive results. The original intent of pre and post assessment was to collect data relevant to an external evaluation of the FOCUS program in terms of its impact on increasing principals' "competencies" in a wide variety of areas. As previously mentioned in this chapter, caution must be expressed when attributing changes in competency assessments to the FOCUS program due to the lack of adequate control data. However, and with this reservation, it appears that principals did increase their scores as a group on the various PPDS instruments.

Principals' self-perceptions of both the frequency and effectiveness with which they performed a variety of activities in their schools were greatly, and significantly increased. To the extent that principals' self-perception of competence eventuates in subsequent performance in the school environment, this is considered an important finding of the assessment.

Principals" self-assessments of greater competence at the end of the FOCUS

program were corroborated to a great degree by those of their teachers, particularly in the area of Curriculum and Instruction performances, a major instructional component of the FOCUS field-based training model. The strongest data from teachers concerning the impact of the FOCUS program in changing principals' performance levels stemmed from comparing "special project" to "non-project" teachers. Apparently, teachers working directly with a principal on the solution of school-related problems, perceive and subsequently rate him/her as more frequently and effectively performing a variety of activities, than teachers not working directly with the principal. This finding makes intuitive as well as empirical sense. However, it might be noted that these same teachers could have rated the principal as generally less competent, if this was their perception based on direct experiences with him/her.

Data derived from administration of the PPDS - External Observer Form I instrument was not as encouraging as that from other sources. It was hoped that evidence relevant to Curriculum and Instruction performances would be greater during post than pre assessment. However, this was not generally the case. A pre and post analysis of the FACT structure of the EO instrument provided data generally demonstrating its sensitivity to other areas of the principalship such as Fiscal and Support Management activities. This does not negate its future use in ROME assessment efforts, however, some refinement of administration and scoring procedures seems suggested.

Overall, pre and post assessment analyses supported the fact that principals participating in the FOCUS training program were generally perceived as more competent by the variety of sources at the end of the program than at its inception. For a first application of the Georgia Principal Assessment System (GPAS) to a field-based training program for principals on a pilot basis, the data derived from "competency" assessments are quite encouraging. The general sensitivity of the PPDS forms to change in perceptions of principals' behaviors

seems well established. In addition, the data "give the appearance" of supporting the impact of the training program on participants' (principals') subsequent performance in the school setting.

ANALYSES OF TEACHER AND STUDENT PERCEPTIONS OF CHARACTERISTICS OF THE SCHOOL WORKING AND LEARNING ENVIRONMENT (GPAS MEDIATING VARIABLES)

Two general levels of criterion variables for the Georgia Principal Assessment System have been defined as Mediating (between principals' performances and student outcomes through teacher morale and school climate/learning environment) and Outcome (student standardized achievement test performance and school attendance). This section of the report describes data summaries for teacher and student responses to the School Survey (teachers), Learning Environment Inventory (secondary students), and the My School inventory (elementary students) derived from a pre and post assessment of schools having principals participating in the FOCUS training program. Summaries of Outcome variable data will not be presented since they were not part of the general FOCUS external evaluation design.

It will be recalled that mediating measures within the GPAS were administered in the Fall of 1975 to provide each FOCUS participant with baseline information to be used for "problem" identification in the school. Consulting with VSC FOCUS supervisors, each FOCUS principal identified a "high-priority", school-related problem using pre assessment data from the School Survey and the Learning Environment Inventory and/or the My School inventory. Contrasts were made between scores on each of these instruments and ROME normative data from the 1974 - 1975 GPAS field test. These contrasts provided each FOCUS participant with teacher and student information about the characteristics of the school working and learning environment to be integrated with the FOCUS problem-solving instructional model. In addition, the data served to identify a "problem" area in the school to

be used as a general guide for participants' selection of required individual learning modules to supplement other FOCUS training activities.*

In evaluating the FOCUS program, it was hoped that significant changes would be demonstrated between pre and post assessment on dimensions of the GPAS mediating measures, if principal behaviors changed and impacted on the school environment as a result of the FOCUS training program. In each of the sections below, caution should be expressed in attributing pre and post assessment differences on the various mediating variable measures to the FOCUS program, due to the absence of appropriate pre and post control data. However, data for the FOCUS participants is contrasted to "normative" data derived from the much larger 1974 - 1975 GPAS field test in 45 schools. In addition, post assessment only comparisons are made with the sample of 10 schools described in chapter II of this report, since data for these schools were collected at approximately the same time as FOCUS post assessment data were collected.

Contrasts with the larger 1974 - 1975 ROME sample allowed for an examination of the FOCUS participants in terms of pre and post assessment differences when compared to a Georgia "norm" for the various measures. Post assessment only comparisons with the sample of 10 schools were made in hopes tha FOCUS principals' teachers and students were significantly more positive in their attitudes towards characteristics of the school environment than those in an essentially comparable system. An examination of student achievement test performance, school ADA, socioeconomic status (inferred from the percentage of students receiving free lunches), and school size indicated that a comparison of post only data from FOCUS schools and the "control" system (n=10 schools) was feasible.

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*A more detailed description of the problem-identification process is available from Dr. Joseph Licata, Department of Educational Administration, Valdosta, State College, Valdosta, Georgia.

Teacher Perceptions of Characteristics of the School Working Environment (Job-Related Satisfactions): The School Survey

The School Survey instrument was administered to all teachers in schools of FOCUS principals on a "take-home" basis allowing from 3 to 5 days for completion. Pre and post assessment data were available from 244 teachers in 12 schools, representing a return rate of about 85 percent of the maximum possible. Since all teacher data were contributed anonymously, school means were used as the units of statistical analysis.

The School Survey is a 118-item inventory that measures teachers' attitudes towards dimensions of their working environment along 14 separate sub-scales. Items were scored from 1--Agree to 3--Disagree, with 2 representing a neutral or "no opinion" score. Thus an assumed neutral or mid-point on any scale is equal to the number of items comprising the scale multiplied by two. The higher the score for any sub-scale, the more positive teachers' attitudes toward that dimension of their work experience and environment. As mentioned above, comparisons of pre and post assessment data were made with the 1974 - 1975 ROME sample of 45 schools in the State of Georgia. Post assessment only comparisons were made with the ROME 1976 sample of 10 schools.

Table 27 presents a summary of FOCUS pre and post assessment and normative group mean, standard deviation, and difference scores for dimensions of the School Survey instrument administered to elementary and secondary teachers. The reader should note that the table is continued on page 96. Mean difference scores were calculated by subtracting the norm group mean score from pre and post assessment mean scores for each of the School Survey factors. Negative difference scores, thus represent a higher norm than pre or post assessment group mean scores for a given factor. Positive difference scores represent just the opposite. Besides pre and post assessment comparisons with the norm group, pre and post assessment mean comparisons were made using t tests for correlated means.

TABLE 27

Summary of F.O.C.U.S. Pre and Post Assessment and Normative Group Mean, Standard Deviation, and Mean Difference Scores for Dimensions of the School Survey Administered to Teachers

School Survey Factors	Pre Assessment (n=244) $\bar{X}$	S.D.	Difference[3]	Norm[1] (n=1200) $\bar{X}$	S.D.	Difference[3]	Post Assessment (n=244) $\bar{X}$	S.D.	
1. Administrative Practices (9)[2]	15.03	2.4	-0.55	15.58	7.2	5.17	20.75	1.5	*
2. Professional Work Load (9)	18.85	1.3	-0.75	19.60	5.0	1.92	21.52	0.8	*
3. Non-Professional Work Load (6)	12.55	1.4	-0.26	12.81	3.8	1.70	14.51	1.3	*
4. Materials and Equipment (8)	13.55	2.3	-2.34	15.89	5.8	1.41	17.30	2.9	*
5. Buildings and Facilities (7)	13.92	2.1	-0.47	14.43	4.5	0.98	15.41	2.3	*
6. Educational Effectiveness (10)	18.61	2.3	-1.67	20.28	6.4	2.08	22.36	1.4	*
7. Evaluation of Students (10)	17.80	1.3	-0.80	18.60	6.3	2.81	21.41	1.6	*
8. Special Services (8)	13.89	2.2	-1.53	15.42	5.2	1.38	16.80	1.8	*

[1]Normative data derived from ROME 1974 - 1975 field test sample of 1200 teachers in 35 elementary and 10 secondary schools in the State of Georgia.

[2]Number of items on sub-scale

[3]Difference column was calculated by subtracting norm mean from either pre or post assessment mean for each sub-scale

*Pre and Post Assessment $\bar{X}$ sub-scale scores for FOCUS teachers significantly different beyond the .001 level.

TABLE 27 (cont.)

School Survey Factors	Pre Assessment (n=244) X̄	S.D.	Difference[3]	Norm[1] (n=1200) X̄	S.D.	Difference[3]	Post Assessment (n=244) X̄	S.D.	
9. School Community Relations (7)[2]	12.25	1.6	-0.84	13.09	5.1	3.80	16.89	0.8	*
10. Supervisory Relations (10)	12.99	3.2	-8.37	21.36	7.2	4.68	26.04	1.9	*
11. Colleague Relations (7)	14.23	2.2	-0.98	15.21	5.0	0.88	16.09	1.8	*
12. Voice in Educational Program (8)	12.96	2.2	-0.27	13.23	5.2	4.42	17.65	1.2	*
13. Performance and Development (10)	18.79	3.2	-1.43	20.22	6.6	3.39	23.61	1.7	*
14. Financial Incentives (9)	11.03	1.1	-3.60	14.63	5.2	0.77	15.40	1.1	*

[1]Normative data derived from ROME 1974 - 1975 field test sample of 1200 teachers in 35 elementary and 10 secondary schools in the State of Georgia.

[2]Number of items on sub-scale

[3]Difference column was calculated by subtracting norm mean from either pre or post assessment mean for each sub-scale

*Pre and Post assessment $\bar{X}$ sub-scale scores for FOCUS teachers significantly different beyond the .001 level

Asterisks to the extreme right of rows in Table 27 indicate significant differences between pre and post assessment scores for dimensions of the School Survey instrument. The general variation between pre and post assessment and norm group standard deviations for the School Survey factors (larger for norm group) is due to the fact that pre and post assessment data were analyzed using school means as the units of analysis.

Comparing pre and post assessment School Survey scores with those for the 1974 - 1975 ROME normative group, several interesting findings emerge. First, FOCUS teachers as a group scored somewhat lower than teachers in the norm group on every dimension of the School Survey during pre assessment. Differences between pre assessment and the larger ROME group were most noticeable for the Supervisory Relations, Materials and Equipment, and Financial Incentives factors. Most important in these findings is the much stronger negative attitude of teachers in FOCUS schools during pre assessment towards Supervisory Relations in the school environment, with the pre assessment mean being 8.37 points lower than the norm group.

A second finding of major interest emerged from comparing post assessment scores with the norm data. Teachers in the FOCUS schools showed significant changes in attitudes measured by the School Survey from pre to post assessment, with every mean scale score surpassing that of the norm group. Most noticeable and important among these changes were significantly more positive attitudes toward Administrative Practices, School Community Relations, Supervisory Relations, Voice in Educational Program, and opportunities for professional Performance and Development.

When pre and post assessment scores were compared with t tests for correlated means, significant differences ($p<.05$) were evident for all School Survey scales. Most notable among these significant differences were large changes

toward more positive attitudes concerning Administrative Practices and Supervisory Relations. Though difficult to attribute these changes in more positive attitudes solely to the FOCUS program, the findings for the Administrative Practices and Supervisory Relations dimensions make intuitive sense when considering the objectives and structure of the training program.

Table 28 summarizes FOCUS non-project, project, and control group post assessment mean, standard deviation, and mean difference scores for dimensions of the School Survey administered to elementary and secondary teachers. Data for non-project teachers is derived from all teachers except those working on a special project with FOCUS principals during the course of the field-based training program. Project teacher data is derived from teachers identified as working on special committees and projects with the FOCUS principals in order to implement FOCUS objectives. T tests for independent means were computed between these two groups (non-project and project) on each dimension of the School Survey instrument. While project teachers were generally more positive in their attitudes towards the working environment than non-project teachers, a statistically significant ($p<.05$) post assessment difference was found for only the Supervisory Relations dimension of the School Survey. Again, this finding makes intuitive sense because project teachers worked more closely with their principals during the course of the FOCUS program than non-project teachers.

The right hand column in Table 28 represents difference scores for dimensions of the School Survey computed by subtracting mean scores derived from a sample of 10 control schools from FOCUS teacher post assessment scores. This allowed for a post assessment comparison between FOCUS teachers and teachers in a similar school not exposed to principals participating in a field-based training program. As can be seen in the table, statistically significant differences in favor of the FOCUS teachers were found for the School Survey factors of Administrative Practices and Financial Incentives. Apparently the

TABLE 28

Summary of F.O.C.U.S. Non-Project, Project, and Control Group Post Assessment Mean, Standard Deviation, and Mean Difference Scores for Dimensions of the School Survey Instrument Administered to Teachers

School Survey Factors	Non-Project Teachers (n=201) $\bar{X}$	S.D.	Project Teachers (n=29) $\bar{X}$	S.D.	F.O.C.U.S. Total Post Assessment Mean Minus Control Group Mean[1] Difference	
1. Administrative Practices (9)[2]	20.61	4.5	20.41	4.3	1.65	*
2. Professional Work Load (9)	21.26	3.8	2.193	0.7	0.10	
3. Non-Professional Work Load (6)	14.41	2.8	14.28	3.1	0.48	
4. Materials and Equipment (8)	16.90	4.6	17.52	4.9	0.79	
5. Buildings and Facilities (7)	15.72	3.6	15.69	3.3	-0.69	
6. Educational Effectiveness (10)	22.11	4.2	22.24	4.1	0.79	
7. Evaluation of Students (10)	21.46	4.6	21.31	5.1	0.18	
8. Special Services (8)	17.18	3.8	16.38	3.6	0.92	

[1]Sub-scale mean difference scores were computed by aggregating teacher responses within 12 FOCUS and 10 Control schools. Differneces thus represent differences between the grand mean of school means.

[2]Number of items comprising sub-scale

*Sub-scale means statistically significant at .05 level.

TABLE 28 (cont.)

School Survey Factors	Non-Project Teachers (n=201) $\bar{X}$	S.D.		Project Teachers (n=29) $\bar{X}$	S.D.	F.O.C.U.S. Total Post Assessment Mean Minus Control Group Mean[1] Difference	
9. School Community Relations (7)[2]	16.74	2.9		17.03	2.8	0.52	
10. Supervisory Relations (10)	25.90	4.5	*	27.38	4.1	0.82	
11. Colleague Relations (7)	16.22	3.6		16.79	4.0	-0.68	
12. Voice in Educational Program (8)	17.48	3.6		17.55	3.9	0.68	
13. Performance and Development (10)	23.63	4.9		23.79	5.2	1.04	
14. Financial Incentives (9)	15.67	4.1		14.55	3.7	1.41	*

[1]Sub-scale mean difference scores were computed by aggregating teacher responses within 12 FOCUS and 10 Control schools. Differences thus represent differences between the grand mean of school means.

[2]Number of items comprising sub-scale

*Sub-scale means statistically significant at .05 level

"year-end" perceptions of FOCUS teachers towards these dimensions of their working environment were significantly more positive than those of teachers in the control school sample.

In summary, several supportive findings resulted from comparing FOCUS teachers' pre and post assessment data with both ROME normative and 1976 control samples. FOCUS teachers demonstrated significantly more positive perceptions of all aspects and characteristics of their working environment at the end of the training program, than at its inception. Support for the strength of these changes was evidenced by comparing FOCUS teachers' post assessment School Survey responses to the much larger ROME "norm" of 45 elementary and secondary schools from 1974 - 1975. It seems doubtful that these changes would merely result from extraneous factors involved in the passage of time... though this is a possibility.

Support for the impact of FOCUS principals on teacher perceptions was provided by analyzing "project" and "non-project" teacher responses to the School Survey on a post assessment only basis. Teachers identified as working more closely with the principal in implementing FOCUS objectives demonstrated significantly more positive attitudes towards Administrative Practices than other teachers. In addition, FOCUS teachers as a total group had a more positive attitude towards Administrative Practices in their school at the end of the school year, than teachers in a comparative, control sample of 10 schools. Though difficult to attribute these changes to the impact of the FOCUS program on principal behavior, they are, at a minimum, quite encouraging considering the "pilot" nature of both the training model and the assessment system.

Secondary Student Perceptions of Characteristics of the School Climate/Learning Environment: The Learning Environment Inventory

Student perceptions of characteristics of the school climate/learning envi-

ronment are conceptualized as mediating variables within the general CIPAS model. Like teachers and principals from FOCUS schools, secondary students were pre and post assessed in an attempt to measure change in student perceptions of school climate characteristics over the course of the FOCUS training program. Secondary students (grades 8 and 11) were administered the 105-item, 15 scale Learning Environment Inventory (LEI) in the Fall of 1975 and again in mid May of 1976. Usable pre and post assessment data were obtained from 852 students in grades 8 and 11 from 5 secondary schools. These data were examined in terms of pre and post assessment changes (differences) and were contrasted to the 1974 - 1975 ROME "norm" and the 1976 sample of 1,003 "control" students. It was hoped that significant changes toward more positive perceptions of characteristics of the school climate/learning environment would occur between pre and post assessment, and that students in FOCUS schools would score significantly higher (more positive) than either the ROME norm or control groups.

Table 29 presents a summary of pre and post assessment and normative group mean, standard deviation, and mean difference scores for the LEI instrument administered to secondary students in FOCUS schools. Each sub-scale on the LEI consists of seven items, each of which was scored from 1--Strongly Disagree to 4--Strongly Agree. Higher mean scores represent more positive perceptions of the characteristic implied by the sub-scale label. An assumed neutral or mid-point score on any LEI dimension corresponds to a mean score of 17.50. Difference scores were derived by subtracting the 1974 - 1975 norm group mean from either the pre or post assessment mean. Thus, negative differences indicate a higher norm mean score, and positive differences represent a higher pre or post assessment mean score. Asterisks to the extreme right of the table rows indicate statistically significant differences between pre and post assessment LEI sub-scale mean scores.

TABLE 29

Summary of Pre and Post Assessment and Normative Group Mean, Standard Deviation, and Mean Difference Scores for the Learning Environment Inventory Administered to Secondary Students

Learning Environment Inventory Factors	Pre Assessment $\bar{X}$	S.D.	Difference[2]	Norm[1] $\bar{X}$	S.D.	Difference[2]	Post Assessment $\bar{X}$	S.D.	
1. Cohesiveness	18.95	1.50	0.68	18.27	3.2	0.88	19.15	1.00	
2. Diversity	19.31	0.79	-0.82	20.13	2.9	-0.30	19.83	0.32	
3. Formality	19.17	0.64	0.71	18.46	3.0	0.51	18.97	0.41	
4. Speed	17.93	0.73	-0.93	18.86	3.7	-0.49	18.37	0.70	
5. Enviroment	16.78	0.61	1.22	15.56	3.3	0.91	16.47	0.34	
6. Friction	19.38	0.61	-0.75	20.13	3.3	0.06	20.19	0.57	*
7. Goal Direction	17.34	0.64	1.12	16.22	3.4	1.10	17.32	0.35	
8. Favoritism	18.20	0.74	-0.10	18.30	3.7	0.22	18.52	0.53	
9. Cliqueness	19.88	0.54	-1.15	21.03	3.2	-0.17	20.86	0.60	*
10. Satisfaction	16.03	1.02	0.98	15.05	3.1	1.08	16.13	0.65	
11. Disorganization	17.56	0.86	-0.59	18.15	3.6	0.14	18.29	0.89	*
12. Difficulty	17.77	0.16	-0.17	17.94	3.0	0.15	18.09	0.20	*
13. Apathy	17.77	0.32	-0.70	18.47	3.5	0.07	18.54	0.87	*
14. Democraticw	16.09	0.39	1.14	14.95	3.1	0.94	15.89	0.44	
15. Competitiveness	18.67	0.45	0.40	18.27	3.4	0.77	19.04	0.35	

[1] Normative data derived from ROME 1974 - 1975 field test sample of 3,613 eighth- and eleventh-grade students in the State of Georgia.

[2] Difference column was calculated by subtracting norm mean from either pre or post assessment mean for each sub-scale

* Pre and Post assessment $\bar{X}$ sub-scale for FOCUS students significantly different from ($p<.05$)

Viewing the data in Table 29, several interesting findings are apparent. First, FOCUS student means were lower than the ROME norm group means at the time of pre assessment for the following LEI sub-scales: Diversity, Speed, Friction, Favoritism, Cliqueness, Disorganization, and Apathy. None of these differences however, was statistically significant when compared with t tests for independent means. At the time of post assessment, FOCUS students scored higher than the ROME norm group on every dimension of the LEI. Again, however, none of these mean differences was statistically significant.

The most revealing data in Table 29 are derived from a comparison of FOCUS pre and post assessment LEI scores with t tests for correlated means. Statistically significant ($p<.05$) differences in favor of higher post assessment scores were found for the following LEI sub-scales: Friction, Disorganization, Apathy, and Democratic. A significantly lower post assessment score was obtained for the Cliqueness dimension of the LEI. Apparently FOCUS students perceived a greater degree of friction among peers, general school disorganization, academic apathy, classroom democracy, and less social cliqueness during post assessment, than during pre assessment. Differences for the other LEI scales were not large enough to reach statistical significance, though post assessment scores were generally higher than pre assessment scores.

While difficult to interpret these data in terms of the impact of the FOCUS program, it is apparent that student perceptions of school climate/learning environment characteristics were significantly changed over the course of the school year for the scales noted above. These changes are difficult to interpret, and may simply represent beginning and end-of-year secondary student attitude changes brought about by a variety of school-related variables in addition to principal behavior. This seems reasonable since FOCUS students tended to move toward the larger 1974 - 1975 ROME norm means for most LEI

scales as the school year progressed. When comparing FOCUS student post assessment means to the norm group means, the largest differences were found for the Goal Direction and Satisfaction dimensions of the LEI. This finding is considered important since past ROME research has shown that these scales have rather high and positive relationships to teachers' assessments of a variety of principal competencies.

Table 30 summarizes FOCUS and control student post assessment mean, standard deviation, and mean difference scores for dimensions of the Learning Environment Inventory. Control group data were derived from 1,003 eighth- and eleventh-grade students in 4 secondary schools in a demographically comparable Georgia school system. Thus, data in the table (30) represent a summary of post assessment only comparisons between FOCUS students and a control sample of students measured at approximately the same time in the late Spring of 1976. Mean scores for dimensions of the LEI for the two groups were tested for statistical significance with t tests for independent means. None of the differences between the two groups, however, reached statistical significance, indicating that students in the two groups had essentially similar perceptions of multiple characteristics of their school environments. It was hoped that FOCUS students would have significantly more positive perceptions than control students, and that tentative conclusions about the impact of the FOCUS program on these perceptions could be derived. Since the t test comparisons demonstrated no significant differences between the two groups, it is questionable that any inferences can be made about the impact of the FOCUS program on secondary student perceptions.

In summary, pre and post assessment, norm group, and control group score comparisons on dimensions of the Learning Environment Inventory did not yield data having general relevance for understanding changes in secondary student

TABLE 30

Summary of Total FOCUS and Control Group Post Assessment Mean, Standard Deviation, and Mean Difference Scores for Dimensions of the Learning Environment Inventory Administered to Secondary Students

Learning Environment Inventory Factors	FOCUS (n=852) $\bar{X}$	FOCUS (n=852) S.D.	Control[1] (n=1,003) $\bar{X}$	Control[1] (n=1,003) S.D.	FOCUS Minus Control Difference
1. Cohesiveness	19.15	1.00	18.88	0.17	0.27
2. Diversity	19.83	0.32	20.09	0.65	-0.26
3. Formality	18.97	0.41	19.17	0.44	-0.20
4. Speed	18.37	0.70	19.18	0.93	0.81
5. Environment	16.47	0.34	16.25	0.92	0.22
6. Friction	20.19	0.57	20.31	0.75	-0.12
7. Goal Direction	17.32	0.35	16.99	0.37	0.33
8. Favoritism	18.52	0.53	19.33	0.87	-0.81
9. Cliqueness	20.86	0.60	21.04	0.97	-0.18
10. Satisfaction	16.13	0.65	15.72	0.59	0.41
11. Disorganization	18.29	0.87	18.27	0.66	0.02
12. Difficulty	18.09	0.20	18.65	0.54	0.44
13. Apathy	18.54	0.87	18.72	0.90	-0.18
14. Democratic	15.89	0.44	15.21	0.79	0.68
15. Competitiveness	19.04	0.35	18.90	0.45	0.14

[1]Control data derived from ROME 1975-1976 field test of the GPAS in 4 secondary schools with 1,003 eighth- and eleventh-grade students.

perceptions coinciding with implementation of the FOCUS training program for principals. The most reasonable explanation for these findings is that students are, in a sense, "one step further removed" from principal behavior than teachers, making the impact of principal performance on student perceptions more difficult to assess. In addition, the main thrust in terms of FOCUS core objectives and program implementation was curriculum and instruction activities with teachers. Thus, any pre and post assessment changes in student perceptions can just as easily be attributed to teacher, as to principal interactions with students. What seems implied for future external evaluations of the FOCUS program is an examination of principals on an individual basis to compare those working more directly with students, to those who do not. From this design, data would hopefully be forthcoming to demonstrate more positive student perceptions of school environment characteristics for students in schools where principals are participating in activities concerned with accomplishing student-related objectives.

Elementary Student Perceptions of Characteristics of the School Climate/Environment: The My School Inventory

Like secondary students in FOCUS schools, elementary students were pre and post assessed in an attempt to measure changes in their perceptions of characteristics of the school climate/environment coinciding with principals' participation in the FOCUS training program. It was hoped that significant changes toward more positive perceptions would be observed as partial support for the positive impact of the FOCUS program on the school environment.

Elementary students were administered the 45-item, five scale My School inventory (an elementary version of the Learning Environment Inventory) in the Fall of 1975 and again during late Spring of 1976. Usable pre and post assessment data were obtained from 1,034 students in grades 3, 4, 5, and 6 in

eight schools. These data were examined in terms of pre and post assessment changes (differences) and were contrasted to the 1974 - 1975 ROME "norm" and the 1976 control sample of 1,200 elementary students in six schools in a demographically comparable school system. It was hoped these comparisons would indicate that elementary students in FOCUS schools would score significantly higher (have more positive perceptions) than either the ROME norm or control samples.

Table 31 presents a summary of pre and post assessment and norm group mean, standard deviation, and mean difference scores for factors of the My School inventory administered to elementary students. An assumed neutral or mid-point score for any scale is 13.5, since each scale contained 9 items which were scored 1--Yes or 2--No. Difference scores were calculated by subtracting the norm group mean from either the FOCUS pre or post assessment mean for each of the five My School factors. Asterisks at the extreme right of the table indicate statistically significant factor mean differences between FOCUS students' pre and post assessment scores. The reader should note that scores for the My School factors are interpreted in a direction opposite that of the scale label because of the scoring procedure applied. That is, a higher Satisfaction mean score indicates student perceptions of relatively less Satisfaction, (i.e., more Dissatisfaction).

Viewing the data in Table 31, several interesting findings concerning elementary student perceptions of characteristics of the school climate/environment emerge. First, during pre assessment FOCUS students perceived their schools' climate as relatively more satisfying, containing less friction, less competitive, less difficult, and less cohesive than the ROME 1974 - 1975 norm group. Post assessment/norm group differences, while in the same general direction, were somewhat smaller than the pre assessment differences mentioned

TABLE 31

Summary of Pre and Post Assessment and Normative Group Mean, Standard Deviation, and Mean Difference Scores for Factors of the My School Inventory Administered to Elementary Students

My School Factors	Pre Assessment $\bar{X}$	S.D.	Difference[2]	Norm[1] $\bar{X}$	S.D.	Difference[2]	Post Assessment $\bar{X}$	S.D.	
1. Satisfaction	12.55	1.2	-1.69	14.24	2.4	-0.89	13.35	1.3	*
2. Friction	11.47	1.0	1.04	10.43	1.6	0.69	11.12	0.8	*
3. Competitiveness	11.15	0.3	0.25	10.90	1.4	0.53	11.43	0.3	*
4. Difficulty	14.32	0.7	-0.11	14.43	1.8	-0.06	14.37	0.7	
5. Cohesiveness	12.49	0.9	-0.63	13.12	1.5	-0.31	12.81	0.6	*

[1]Normative data derived from ROME 1974 - 1975 GPAS field test with 3,350 elementary students in 35 schools

[2]Difference scores were calculated by subtracting norm mean from either pre or post assessment mean for each sub-scale

*Pre and Post assessment $\bar{X}$ sub-scale scores for FOCUS students significantly different from zero ($p<.05$)

above. Apparently FOCUS elementary students became somewhat more like the norm group of students in their perceptions over the course of the school year. Rather than implying anything about the impact of the FOCUS program on student attitudes, these data may indicate that My School score norms vary with the time of year in which the instrument is administered.

Differences between FOCUS elementary students' pre and post assessment scores on the My School scales were tested for statistical significance with t tests for correlated means. As can be seen in the table (31), statistically significant changes in perceptions towards 4 of the 5 My School scales were evident. FOCUS students perceived their schools as generally less satisfying, containing more friction, less competitive, and less cohesive during post assessment, than during pre assessment. Again, these data may represent the fact that sub-scale scores for the My School instrument vary considerably depending upon the time of year the instrument is administered. Elementary (as well as secondary) students may be less positive towards dimensions and characteristics of their school environments, toward the end, rather than toward the beginning of the school year. Since such a long time period existed between pre and post assessment with the My School instrument, and since, as mentioned above, students are one step further removed from interaction with the principal than with teachers, any inferences about the FOCUS training program for principals and its effects on student perceptions are tenuous at best.

Table 32 summarizes FOCUS and control student post assessment mean, standard deviation, and mean difference scores for dimensions of the My School instrument. Control group data were derived from 1,200 fourth- and sixth-grade students in 6 elementary schools in a demographically comparable Georgia school system. Thus, data in Table 32 represent a summary of post assessment only

TABLE 32

Summary of Total FOCUS and Control Group Post Assessment Mean, Standard Deviation, and Mean Difference Scores for Factors of the My School Inventory Administered to Elementary Students

My School Factors	FOCUS (n=1,034) $\bar{X}$	S.D.	Control[1] (n=1,200) $\bar{X}$	S.D.	FOCUS Minus Control Difference	
1. Satisfaction	13.35	1.3	13.73	1.3	-0.38	
2. Friction	11.12	0.8	10.75	0.5	0.37	
3. Competitiveness	11.43	0.3	11.07	0.4	0.36	*
4. Difficulty	14.37	0.7	14.10	0.5	0.27	
5. Cohesiveness	12.81	0.6	13.13	0.5	0.32	

[1]Control data derived from ROME 1974 - 1975 GPAS field test with 3,350 elementary students in 35 schools

*Sub-scale means significantly different from zero ($p<.05$)

comparisons between FOCUS elementary students and a control sample of students measured at approximately the same time during the late Spring of 1976. Differences between mean scores for the two groups were tested for statistical significance using t tests for independent means. School means were used as the units of statistical analysis. As can be seen in the table (32), FOCUS elementary students scored significantly higher on the Competitiveness sub-scale of the My School than students in the control group. Apparently FOCUS students perceived their school environments as characterized by significantly less academic competition than control group students. (It should be remembered here that higher scores on the My School represent less of the perception implied by the sub-scale label). It was hoped that difference scores between the FOCUS and control elementary students would be statistically significant in the direction of the FOCUS group. However, the analyses seemingly indicated that FOCUS elementary student perceptions of characteristics of their school environments were essentially the same as those for the control sample. These data provide little information related to the impact of the FOCUS program on principal behavior and subsequent change to more favorable student perceptions of school environment characteristics.

In summary, it appears that elementary student perceptions in FOCUS schools did significantly change between the times of pre and post assessment, but little can be said about principals' impact on these perceptions. Future external evaluations of the FOCUS program might profit from comparing student responses to instruments such as the My School in schools having principals implementing student-oriented training objectives to either, 1) control schools containing principals undergoing no training, or 2) principals implementing training objectives relevant to other school "publics" (e.g., teachers).

General Conclusions

The general lack of a "true" control group of schools from which pre and post assessment data could be derived for all instruments in the Georgia Principal Assessment System (GPAS) did little to enhance the quality of the external evaluation of the FOCUS participants. As mentioned in the beginning of this chapter, time and budget constraints did not allow for such a pre and post "control" group assessment. Without a true experimental and control group pre and post assessment evaluation design, conclusions relative to the specific impact of the FOCUS program on principal performance and subsequent change in teacher and student school climate assessments can only be tentative. Attempts were made for certain GPAS instruments to compare FOCUS data to the 1974 - 1975 ROME "norm", and to a highly similar (control) school system assessed during the Spring of 1976. However, differences evident from these comparisons are only suggestive of the potential impact of the FOCUS program on principal performances in the school environment.

Considering the variety of instruments in the GPAS, the overall objectives of the FOCUS effort at implementing a field-based instructional model for school principals, and the "pilot" nature of this model, several general conclusions based on the external evaluation data seem in order. Each of these is explicated below.

1. There was a general increase in the perception of principals' competencies as being both more frequently and effectively performed at the termination of the FOCUS program, than at its inception. This finding was generally true for principals' own self-assessments, assessments by teachers, and assessments by an external observer. The most encouraging data related to the assessment of principals' competencies were derived from

comparing competency assessments of "project" to "non-project" teachers. These data supported the fact that teachers working directly with the principal on instructional problems as a result of the FOCUS program, rated the principal as both more frequently and effectively performing activities in the Curriculum and Instruction Functional Area of Administrative Responsibility than other teachers. Within the limitations mentioned above, the data lended strong support for an increase in principals' competencies as a result of the FOCUS training program experience.

2. There was apparently some "program overspill" in terms of effects on perceptions of principals' performances in a wide variety of areas. Even though the FOCUS training program was specifically structured around FACTs and performance indicators from the general area of Curriculum and Instruction, pre and post analyses of principals' performances in a variety of other areas, showed significant changes in the direction of higher post assessment scores. Thus, principals increased their competency scores over the course of the FOCUS program in many areas other than the Curriculum and Instruction area. The specific areas of increase varied considerably with the three competency assessment devices (PPDS Form I instruments).
3. Teacher responses to the School Survey instrument showed considerable change between pre and post assessment, in that statistically significant differences were noted for all sub-scales of the instrument in favor of higher (more positive) post assessment scores. FOCUS teachers felt signi-

ficantly more positive towards all aspects of their working environment at the end of the FOCUS program, than at its beginning. In addition, when project teachers were compared to non-project teachers on post assessment scores, project teachers were significantly more positive in their attitudes towards Administrative Practices and Supervisory Relations in the school...School Survey sub-scales having many items referring to teacher/principal relations and interactions.

4. Data derived from the pre and post assessment administration of the LEI and My School inventories was not encouraging in terms of its benefit in evaluating the impact of the FOCUS program. Where significant pre and post assessment differences for dimensions of these instruments did occur, it was noted that these might simply represent a change in norm values for the instruments owing to the time of year in which they were administered. Future analyses of the ROME data base during the 1976 - 1977 project year should facilitate understanding these differences more thoroughly.
5. The LEI and My School instruments should not be discontinued as part of the GPAS when applied to field-based programs, in that they have potential for assessing the impact of principal behavior on student perceptions of school climate/learning environment characteristics, specifically in instances where principals are implementing student-related instructional objectives.

In summary, it appears that the application of the Georgia Principal

Assessment System to a pilot field-based training program for public school principals was generally successful. In terms of providing participants and instructors with baseline data from which to build the program, and in providing external evaluation data for assessing program impact on principal behavior and subsequent elements in the school environment, the general findings are considered mostly positive. Stronger support for these statements is evidenced by the mostly positive assessment of the training program and its components by the participants themselves. Refinement of the GPAS and the FOCUS program during the 1976 - 1977 project year, when combined with a "tighter" external evaluation design, will predictably improve the value of both the FOCUS training model in changing principal behavior, and the sensitivity of the GPAS in detecting these changes.